

MODELO

PED.012.03

Course	Graduation in Sports					
Subject	Methodology of Aquatic Activities					
Academic year	2023/2024	Curricular year	3rd	Study period	1st semester	
Type of subject	Mandatory	Student workload (H)	Total: 162	Contact: 75	ECTS	6
Professor(s)	Raul Filipe Barbosa Bartolomeu					
☑ Area/Group Coordinator☐ Head of Department		Carolina Júlia Félix Vila-Chã				

PLANNED SUBJECT DESCRIPTION

1. LEARNING OBJECTIVES

At the end of the semester the student should be capable of:

- 1 Know the target population of each aquatic program and the specific characteristics of the environment;
- 2 Understand the acute response and chronic adaptation to physical exercise (i.e., aquatic program effects);
- 3 Master the structuring methods of the teaching-learning process of each aquatic program;
- 4 Know and implement recommendations for the evaluation of certain characteristics in aquatic environment.

2. PROGRAMME

- A. Characterization and importance of a swimming school:
- General characterization (objectives, organizational chart, activities and services, timetables and prices), organization and planning procedures, spatial and material resources, hygiene and safety and technical-pedagogical model (learning stages, the technical director and the swimming teacher).
- B. Scientific and Pedagogical Competence of the Water Activities Teacher:
- Scientific competence (fluid properties and flow, hydrostatics and hydrodynamics), pedagogical competence (teaching methods, teaching styles and teaching tasks) and practical applications to the study in different aquatic activities.
- C. Adaptation to the Aquatic Environment: 1st childhood:
- Framework (the typology and the phase of global motor development), objectives (psycho-motor, socio-affective and cognitive), organizational aspects (weekly frequency and schedule, duration and composition of the class and homogenization of classes), characteristics of the surroundings (the pool, the environment, the clothing and auxiliary material), manipulations (principles, classification and technical description), contents and pedagogical progressions (adaptation to the place, fluctuations, displacements, immersions, passages, jumps, interrelation and planning).
- D. Adaptation to the Aquatic Environment: 2nd childhood onwards:
- Framework (in the typology of aquatic activities and in the phase of global motor development), objectives (familiarization, autonomy, creation of aquatic bases, aquatic readiness), organizational aspects (pool depth, didactic material and teacher positioning), contents and pedagogical progressions



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(balance, breathing, propulsion, manipulations, interrelation, planning and assessment of aquatic readiness).

E. Learning and swimming Improvement:

- Framework (in the typology of aquatic activities and in the phase of global motor development), teaching methodology (macro-sequence of teaching in swimming, methodological sequence for the teaching of alternating and simultaneous techniques and the techniques of starts and turns, most common mistakes and correction proposals), planning and organization process (thematic unit plan, lesson plan and organizational characteristics of the session), evaluation and control (qualitative and quantitative assessment of technical capacity).

F. Head-out aquatic programs:

- Framework (concepts, aquatic fitness vs. hydrotherapy), target population (prescription and value of in-water exercises), benefits (body composition, muscle strengthening, cardiovascular condition, energy expenditure and interpersonal relationships), class structure (introduction, cardiorespiratory conditioning, muscle conditioning and cool down), music and choreography (function, structure and musical rhythm, methods of choreographic assembly), manipulation and evaluation of exercise intensity (anatomical levers, palm orientation, auxiliary equipment and musical cadence) and variants (auxiliary material, specific postures and gestures, musical options and muscular incidence).

3. COHERENCE BETWEEN PROGRAMME AND OBJECTIVES

The contents A "Characterization and importance of a swimming school", B "Scientific Competence and Pedagogical of the Water Activities Teacher" refer to objective 1 "Knowing the target population of each aquatic program and the specific characteristics of the environment". The contents C "Adaptation to the Aquatic Environment: 1st childhood", D "Adaptation to the Aquatic Environment: 2nd childhood onwards" E "Learning and swimming improvement" and F "Head-out aquatic programs" refer to the competences 2 "Understanding the acute response and chronic adaptation to physical exercise (i.e., aquatic program effects", 3 "Mastering the structuring methods of the teaching-learning process of each aquatic program" and 4 "Know and implement recommendations for the evaluation of certain characteristics in the aquatic environment".

4. MAIN BIBLIOGRAPHY

Aquatic Exercise Association. (2018). Standards and guidelines for aquatic fitness programming. Nokomis, FL.

Barbosa, T., Queiros, T. (2004). Ensino da Natação. Ed. Xistarca. Lisboa.

Barbosa, T., Queiros, T. (2005). Manual Prático de Atividades Aquáticas e Hidroginástica. Ed. Xistarca. Lisboa.

Barbosa, T.M., Costa, M.J., Marinho, D.A., Queirós, T.M., Costa, A.M., Cardoso, L., Machado, J., Silva, A.J. (2015). Manual de referência FPN para o ensino e aperfeiçoamento técnico em natação. Edição: Federação Portuguesa de Natação. Lisboa.



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Martins, M. (2016). Bebés na água: a descoberta do meio pela educação aquática. Cadernos do Treinador 1. Confederação de Treinadores de Portugal.

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Raposo, A. V. (2015). Escola de Natação: uma necessidade, uma responsabilidade. Edição: Associação Portuguesa de Técnicos de Natação. Rio-Maior.

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Taylor, J. (2013). Water Aerobics: how to lose weight and tone your body in the water.

QUINA J.N. (2009). A organização do processo de ensino em Educação Física. Instituto Politécnico de Bragança, Bragança.

5. TEACHING METHODOLOGIES (INCLUDING EVALUATION)

Theoretical classes will work as a space for content transmission to understand the benefits and purposes of applying various activities in the aquatic context. Theoretical-practical classes will focus on the individual or group work underlying the construction and planning of aquatic programs. The laboratory practice classes will provide students with the essential knowledge for the exercise of aquatic activities and will enable their consolidation through practical experience in the context of a simulated class.

The use of any type of mobile equipment in the classroom is prohibited without express authorization from the teacher: Any violation of this rule may result in a disciplinary action.

The final evaluation will focus on the student's performance in the practical component (65%) underlying the creation and applicability of three practical sessions with a minimum grade of 8 values. There will also be an evaluation of the performance in the theoretical component distributed by the realization of three thematic tests (35%). Students under special status will have to attend the evaluation moments. If the minimum grade for passing a distributed assessment has not been reached, there will be an exam with an overall score of 100%.

6. COHERENCE BETWEEN TEACHING METHODOLOGIES AND OBJECTIVES

The methodologies were selected in order to maximize the acquisition of content associated with each competence acquired. An exposition of the contents orally and through multimedia resources will



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be carried out. This methodology will be used to better present the fundamental contents associated with all competences. Furthermore, a strong focus on the practical execution of contents will take place such as teaching simulation situations to develop and consolidate skills associated with planning, prescribing and managing programs of aquatic activities. A simultaneous support with tutorial guidance transversal to all components will also take place.

7. ATTENDANCE

To be admitted in the continuous evaluation, students will have to participate (actively and practically) in at least 55 hours of the 75 contact hours allocated to the Curricular Unit.

Students who failed the subject in the previous year, if in possession of proof of overlapping timetables with other subjects from the curricular year in which they are enrolled, must coordinate with the teacher the attendance regime to be followed. Nevertheless, presence at all evaluation moments is mandatory.

Students with special statuses refer to the attendance rules in use at ESECD for those same statuses.

Notwithstanding the specific attendance regime in this curricular unit, the student is required to be punctual, and failure to comply with this rule must only be exceptional and justified.

8. CONTACTS AND OFFICE HOURS

Professor: Raul Filipe Barbosa Bartolomeu *Contact:* bartolomeu@ipg.pt

Office hours: Tuesday, 14:00h-18:00h Thursday, 10:30h-12:30h

DATE

ESECD, the 30th of September of 2023