

SUBJECT DESCRIPTION

MODELO
 PED.012.03

Course	Master in Pre-School and Primary School Teaching				
Subject	Environmental Studies in Pre-School and Primary School				
Academic year	2023/2024	Curricular year	1st	Study period	1st semester
Type of subject	Compulsory	Student workload (H)	Total: 162	Contact: 75	ECTS 6
Professor(s)	Rosa Branca Cameira Tracana Pereira, Paula Amaro, Ana Lopes e Urbana Bolota				
<input type="checkbox"/> <i>Area/Group Coordinator</i> <input type="checkbox"/> <i>Head of Department</i>	(select) Maria Eduarda Ferreira				

PLANNED SUBJECT DESCRIPTION

1. LEARNING OBJECTIVES

- Developing scientific literacy of students such as the concepts , processes and phenomena of the surrounding;
- Characterize different forms of relationship between humans and the environment and interpret environmental problems from a perspective of sustainability;
- Apply basic knowledge of natural sciences in new situations;
- Contact with new situations that are both occasions of discovery and exploration of the world;
- Distinguish the different materials that make up the Earth;
- Understand the importance of knowing the past in order to understand the future, acquiring skills in structural matters of historical time and knowing the history of Portugal from diachronic and synchronic mode.

2. PROGRAMME

- The inter - relationship between the diversity of living things and the environment
- Environmental Education and sustainability
- Health and Safety
- Experimental activities in order to discovery the natural environment
- The physical and structural elements of the environment
- The space and its territorial
- The Iberian Peninsula: the formation of the first peoples of Portugal (XII century), the Iberian Union (XVI century and Restoration (XVII century) .

- From Portugal eighteenth century to the consolidation of liberal society and the twentieth century.

3. COHERENCE BETWEEN PROGRAMME AND OBJECTIVES

The syllabus allow the formation of a holistic concept of integrated knowledge and to increase the scientific literacy of students as the concepts, processes and phenomena of the environment. Another objective of the UC aims to use the correct techniques and laboratory procedures.

4. MAIN BIBLIOGRAPHY

Antão, A.M. (2006). *Algumas noções e conceitos sobre alteração de rochas*. Instituto Politécnico da Guarda. Coleção de manuais da ESTG.

Bloch, Marc (1993): *Introdução à História*. Mem Martins: Europa América.

Brilha, J. (2005). *Património geológico e geoconservação: a conservação da natureza na sua vertente geológica*. Viseu: Ed. Palimage.

Brilha, J., Pereira, P. e Dias , N. (2012). *Património geológico : geossítios a visitar em Portugal*. Porto: Porto Editora.

Costa, João Paulo Oliveira e (coord) (2014): *História da Expansão e do Império Português*. Lisboa: A Esfera dos Livros.

Dacosta, Fernando (1998): *Máscaras de Salazar*. Lisboa: Editorial Notícias.

Enciclopédia ilustrada DeAgostini (2002). *O Magnetismo - tudo sobre experiências*. Sintra: Marus Editores.

Kump et al. (2004). *The Earth System*, 2th Edition. Pearsom Hall, New Jersey.

Feynman, R., Seis (1998). *Piezas Fáciles - la Física explicada por un genio*. Barcelona: Drakontos.

Galopim de Carvalho, A. M. (1997). *Geologia. Petrogénese e orogénese*. Universidade Aberta.

Galopim de Carvalho, A. M. (2002). *Introdução ao estudo do Magmatismo e das Rochas Magmática*. Âncora Editora.

Galopim de Carvalho, A. M. (2003). *Geologia Sedimentar. Sedimentologia*. Âncora Editora.

Galopim de Carvalho, A. M. (2003). *Geologia Sedimentar. Vol. I - Sedimentogénese*. Âncora Editora.

Galopim de Carvalho, A. M. (2011). *Dicionário de Geologia*. Âncora Editora

Gibson, G. (2001). *Brincar com Imanes*. Editores e distribuidores.

Jesus, Elisabete; Alves, Eliseu (2015): *A minha História dos Descobrimentos*. Porto: Porto Editora.

- Mader, S. & Windelspechr, M. (2012). *Biology*. McGraw-Hill Science/Engineering/Math; 11 edition.
- Mader, S. (2012). *Lab Manual for Biology*. McGraw-Hill Science/Engineering/Math; 11 edition.
- Marques, A. H. de Oliveira (2006): *Breve História de Portugal*. Lisboa: Editorial Presença.
- Martins, I., et al. (2008). *Explorando a Eletricidade... lâmpadas, pilhas e circuitos*. Ministério da Educação.
- Martins, O. (2011). *História de Portugal*. Lisboa. ed. Vercial.
- Mattoso, José (1993): *História de Portugal*. Lisboa: Círculo de Leitores.
- _____ (1988): *Identificação de um país*. Lisboa: Estampa.
- Melendez, B. e Fuster, J. (1984). *Geologia*. Paraninfo S.A. Madrid.
- Odum, E.P. (2004). *Fundamentos de Ecologia*. Lisboa, Fundação Calouste Gulbenkian. - Pinheiro, A.C.F.B.P
- Oliveira, M.C. (2002). *Manual de Higiene e Segurança na Escola*. Casa do Professor.
- Peres, Damião (1992): *Como nasceu Portugal*. Porto: Vertente.
- _____ (s.d.): *História dos Descobrimentos Portugueses*. Porto: Vertente.
- Plummer, C., Carlson,D. H. e Hammersley, L. (2013). *Physical Geology*. McGraw-Hill. 14th EditionEd.
- Ramos, R. et al. (2012). *História de Portugal*. Lisboa. Esfera dos Livros.
- Rebelo, J. (1999). *As cartas geológicas ao serviço do desenvolvimento*. Instituto Geológico e Mineiro.
- Reif, F. (2005). *Understanding Basic Mechanics*. New York : John Wiley.
- Santos, António Costa (2007): *Proibido!*. Lisboa: Guerra e Paz.
- Silva, M. e Xavier, L. (1994). *Técnicas Laboratoriais de Biologia*. Lisboa: Lisboa Editora.
- Soares, C., Gonçalves, H., Baptista, I., Cunha, J., Martins, N. & Espiña, Y. (2011). *Sustentabilidade do Planeta*. Letras & Coisas.
- Vega, S. (2006). *Ciência 0-3*. Barcelona: Graó.
- Velho, J.L. (2010). *Mineralogia industrial. Princípios e Aplicações*. Lidel Editora.
- Williams, R., et al. (1987). *Ciência para crianças*. Lisboa: Instituto Piaget.

5. TEACHING METHODOLOGIES (INCLUDING EVALUATION)

Methodologies include: exhibition / interactive lessons, group. Are used as learning environments: under schemes, projection slides, multimedia aids, texts of different origin for

SUBJECT DESCRIPTION

MODELO
PED.012.03

reflection and discussion. The practical component will include the completion of experimental protocols with investigative and demonstrative character.

The evaluation shall be performed by a dynamic and continuous process, with formative dimension, agreed with the students. Being subject to the respective regulations in the School of Education , Communication and Sport Guard , is defined operationally by the following elements : written tests knowledge assessment(50%); active participation in class and reporting(30%) and small research projects guided by the teacher in which they can apply the knowledge acquired (20%).

In compliance with Order No. 12/P.IPG/2021 of January 22, 2021, the teaching began to be done at a distance. Thus, the following computer systems/platforms were used: COLIBRI, ZOOM (Synchronous typology), Sigarra and e-mail (asynchronous typology).

6. COHERENCE BETWEEN TEACHING METHODOLOGIES AND OBJECTIVES

The methodologies used in this UC include: exhibition / interactive, group sessions, fostering research and collective reading of the available documentation on the proposed contents, as well as reports of laboratory activities and screenplays. Are used as learning environments: under schemes, projection slides, multimedia aids, texts of different origin for reflection and discussion. Students are encouraged and guided by the teacher to reflect, discuss and will be guided in planning and executing experimental activities, framed in the context of the medium next in order to subject their ideas to the test of evidence. It also refers to the experimental verification performed by students under the supervision of teachers. In the tutorial lessons oriented monitoring of the work done by the students will make - up.

7. ATTENDANCE

If the student opts for continuous assessment will have to attend 2/3 of the classes.

8. CONTACTS AND OFFICE HOURS

Rosa Branca Tracana

Contacts:

SUBJECT DESCRIPTION

MODELO
PED.012.03

rtracana@ipg.pt, paulaamaro@ipg.pt, anaventura@ip.pt, ubolota@ipg.pt

DATE

16 de outubro de 2023

SIGNATURES

Area/Group Coordinator

[
]
(signature)

Professor

[
]
(signature)

Professor

[
]
(signature)

Professor

[
]
(signature)

Professor

[
]
(signature)