ipb
INSTITUTO POLITÉCNICO
DE BRAGANÇA

Course Unit	Digital Resources and Technologies in Special and Inclusive Education		Field of study	Information and Communication Technologies		
Master in	Special and Inclusive Education		School	School of Education		
Academic Year	2023/2024	Year of study	1	Level	2-1	ECTS credits	6.0
Type	Semestral	Semester	2	Code	5073-800-1205-00-23		

| Workload (hours) | 162 | Contact hours | T | 10 | TP | 25 | PL | - | TC | - | S | - | E | - | OT | 10 | O | - |

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s)	Maria Raquel Vaz Patrício

Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:
1. Understand the need to develop digital skills for the inclusion of children with specific needs in the digital society.
2. Knowing and using technologies to amplify human capacities in educational contexts.
3. Selecting, adapting, developing and exploiting personalized digital resources.
4. Explore the potential of emerging technologies in special and inclusive education.

Prerequisites

Not applicable

Course contents

Inclusion in the digital society. Digital technologies and the amplification of human capacities. Digital educational resources. Emerging technologies in special and inclusive education.

Course contents (extended version)

1. Inclusion in the digital society
   - The digital transition and the need to develop skills.
   - The competency school and digital skills for the 21st century.
   - Info-exclusion.
   - Competences for inclusion in teacher digital competence standards.
2. Digital technologies and the amplification of human capacities
   - Universal design and digital technologies.
   - Assistive technologies.
   - Digital accessibility.
   - Digital technologies for optimizing cognitive development.
3. Digital educational resources
   - Education resources for specific needs.
   - Selection and adaptation of digital educational resources.
   - Creating and customizing digital educational resources.
4. Emerging technologies in special and inclusive education
   - Augmented reality in special and inclusive education.
   - Programming and robotics for capacity optimization.
   - Artificial intelligence in special and inclusive education.

Recommended reading

1. Daniela, L. (2022). Inclusive Digital Education. Springer.
2. Híjos, A.; Cosculluela, C. (Coord.) (2021). Inclusión educativa y tecnologías para el aprendizaje. Editorial Octaedro.
3. Marchena, C. (2018). Las TIC como Herramientas de Inclusión Educativa. Editorial Academia Española.
4. Ribeiro, J. (2019). As TIC e as Tecnologias de Apoio na educação de pessoas com necessidades educativas especiais. Instituto do Emprego e Formação Profissional, I.P. & CITEFORMA.
5. Weber, H.; Elsner, A.; Wolf, D.; Rohs, M.; Turner-Cmuchal, M. (Eds.) (2022). Inclusive Digital Education. European Agency for Special Needs and Inclusive Education.

Teaching and learning methods

Theoretical exposition of central themes, accompanied by analysis of documents and videos, followed by large group discussions. Analysis and discussion of practical cases. Flipped classroom. Online discussion forums. Seminars on digital initiatives and products for inclusion. Selection, adaptation and creation of digital resources for inclusion. Exploration of robotics and visual programming.

Assessment methods

1. Continuous Assessment - (Regular, Student Worker) (Final)
   - Development Topics - 30% (Group work: written research and literature review on a topic in the program)
   - Practical Work - 30% (Planning, creating and exploiting a personalized digital resource and reflecting on the intervention)
   - Work Discussion - 10% (Online and face-to-face debates: quality of interventions, regularity and quantity)
   - Portfolio - 30% (Portfolio of reflections and digital products produced)
2. Exame Assessment - (Regular, Student Worker) (Supplementary, Special)
   - Final Written Exam - 100% (Exam)

Language of instruction

Portuguese

Electronic validation

Maria Raquel Vaz Patrício	Manuel Florindo Alves Meirinhos	Carla Isabel Pedroso de Lima da Conceicao	Carlos Manuel Costa Teixeira
27-11-2023	27-11-2023	27-11-2023	11-02-2024

Electronic validation

Maria Raquel Vaz Patrício	Manuel Florindo Alves Meirinhos	Carla Isabel Pedroso de Lima da Conceicao	Carlos Manuel Costa Teixeira
27-11-2023	27-11-2023	27-11-2023	11-02-2024