COURSE PROGRAM

Academic Year: 2023/2024

Identification and characteristics of the course			
Code	502854 (TTC-B)	ECTS Credits	6
Course name (Spanish)	Recursos Tecnológicos Didácticos y de Investigación		
Course name (English)	Digital Educational and Research Resources		
Degree programs	Primary Education – Bilingual module		
Center	Teacher Training College		
Semester	2	Type of course	Basic
Module	Basic trainning		
Matter	Educational processes and context		

Lecturer/s			
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Área de conocimiento	Didactics and School Organization (DOE) Research and Diagnostic Methods in Education (MIDE)
Departamento	Education Sciences
Profesor coordinador (si hay más de uno)	Jesús Valverde Berrocoso María José Godoy Merino

Competences
General Competences:

CG11 - To be familiar and apply the information and communication technologies in the 2 classroom. To selectively discern audiovisual information that contributes to learning, civic education and cultural wealth.
Transversal Competences:
CT1.3 - To use new information technologies as a tool for intellectual work and as an essential element for gathering information, learning and communicating.
CT2.3 - To be updated in the socio-educational field through research and to know how to analyse future trends.
Competencias Específicas:
CE19 - To be familiar with and apply methodologies and basic techniques of educational research and be able to design innovative projects identifying assessment indicators
Contents
Brief description and contents
The subject "Didactic and Research Technological Resources" has a basic, applied and transversal character. Its contents focus on the following aspects: – Technological means and resources for education. – The design and elaboration of didactic materials for the practice of the Primary Education teacher. – Research in education. Characteristics and social and educational impact of audiovisual and digital culture. Multimedia educational materials. Design, development and evaluation of teaching and learning processes with ICT and the use of different didactic, organizational and administrative applications. Virtual learning environments. Collaborative work in virtual spaces. Aspects related to the specific ICT programmes of the Regional Government of Extremadura. Epistemological foundation of scientific methods in educational contexts. Development of scientific research: process and fundamental concepts.
Syllabus of the subject
Title of topic 1: Educational technology and the primary education curriculum. **Contents of topic 1**: Conceptualizations of Educational Technology. Digital competence in Primary Education. Digital competence in teaching. Digital literacy, digital divide and critical citizenship. **Description of the practical activities of topic 1:** Case analysis, problem solving and/or project design.
Title of topic 2: Digital teaching aids: applications and teaching methodologies. **Contents of topic 2:** Free software for Primary Education. Classification of applications for education. Teaching methodologies in the use of technologies in educational contexts. **Description of practical activities in topic 2:** Case studies, problem solving and/or project design.
Title of topic 3: Design and development of digital learning materials. **Contents of topic 3:** Open Educational Resources. Procedure for the selection, design and development of digital learning materials. Applications for the creation of digital learning materials. **Description of the practical activities of topic 3:** Case analysis, problem solving and/or project design.
Title of topic 4: Epistemological foundations of scientific research in Education **Contents of topic 4:** Considerations about the concept of science. Characteristics of educational research. Scientific guarantees in educational research. **Description of the practical activities of topic 4:** Case analysis, problem solving and/or

project design.

Title of theme 5: Quantitative and qualitative methods in educational research.

Contents of topic 5: The research planning process. Hypotheses and variables. Sampling. Quantitative and qualitative research in education.

Description of the practical activities of topic 5: Case analysis, problem solving and/or project design.

Title of theme 6: Introduction to techniques and instruments for data collection and analysis in educational research**.**

Contents of topic 6: Techniques and instruments for collecting information. Techniques and resources for data analysis in educational research.

Description of the practical activities of topic 6: Case analysis, problem solving and/or project design.

Educational activities

Student workload in hours by session		Lectures	Practical activities				Monitoring activity	Homework
Lesson	**Total**	**L**	**HI**	**LAB**	**COM**	**SEM**	**SGT**	**PS**
1	17	8						9
2	54	8				14		32
3	34	6				8		20
4	8,5	2						6,5
5	16	3				4		9
6	18,5	3				4		11,5
Evaluation	2							
TOTAL	**150**	**30**	**0**	**0**	**0**	**30**	**0**	**90**

L: Lectures (100 students).

HI: Hospital internships (7 students)

LAB: Laboratory or field practices (15 students)

COM: Computer room or language laboratory practices (30 students)

SEM: Problem classes or seminars or case studies (40 students)

SGT: Scheduled group tutorials (educational monitoring, ECTS type tutorials)

PS: Personal study, individual or group work and reading of bibliography

Teaching Methodologies

1. **Verbal presentation. Directive teaching.** Large group classes aimed at exposing the different concepts and procedures associated with the subject with the help of bibliographic and audiovisual materials.

   • Its formative value lies in the fact that it can offer students a model of how to operate with knowledge until it is communicable to others and, more basically, to oneself. An explanation can provide models of how to reason with knowledge, how to identify and assume its limitations.

2. Case analysis and problem solving. Presentation of different cases by specialists and professionals; viewing of real situations, scientific and technical documentaries and exposition of resources; analysis of them. These activities are aimed at introducing theoretical notions and applying competencies of the subjects included from practical assumptions.

• It involves the representation of a reality situation as a basis for reflection and learning. The presentation of a case is always a significant learning opportunity to

the extent that those who participate in its analysis manage to get involved and commit, both in the discussion of the case and in the group process for reflection.

3. Project design. This activity aims to guide and coordinate different aspects of the project (delimitation of the object of the work, bibliographic selection, structure, etc.) independently, individually or in small groups.

• Develop collaborative learning. It allows to develop processes of assimilation and construction of the discipline, which serve all participants and establish a new way of learning among equals.

• It is a learning experience that focuses on the core concepts and principles of a discipline, engages students in problem solving and other meaningful tasks, allows them to work autonomously to build their own learning, and culminates in real results generated by themselves.

4. Guidance, decision-making and resolution of doubts raised by the student. Monitoring of the student's non-presential work. Monitoring of individual or small group work. Consultation and individual and group counseling.

• It is characterized by being a flexible system. It is a modality that allows you to go to the teacher at different times, depending on the academic needs of the student. It relies on communication through the virtual classroom (UEx Virtual Campus).

Learning Outcomes

- Understanding of the concepts, processes and procedures and their application (their use in problem solving and as an analytical tool of reality).
- The student's ability to relate and integrate the different materials and contents.
- Active participation in the practices carried out in the Seminar-Laboratory and in the Tutorials.
- Showing oral and written verbal strategies during oral presentations and monographic work.
- Compilation and synthesis of diverse information on specific topics.

Assessment Systems

Assessment Systems	*Weights*
Final Exam	60%
Continuous evaluation	40%

The evaluation of the CT1.3 and CG11 competencies represents 67% of the final grade and the evaluation of the CT2.3 and CE19 competencies represents 33% of the final grade.

To pass the course, it is an essential requirement to obtain a grade of 5 in the evaluation test/s and/or the individual or collaborative works that are part of the continuous evaluation.

Following the current Assessment Regulations (DOE, No. 212 of November 3, 2020) the «choice of the final global assessment modality corresponds to the students, who may carry it out, during the deadlines established for each of the calls of the subject". These requests will be made through the «consultation» tool in the virtual classroom of the subject, «during the first quarter of the period of teaching the subject, or until the last day of the enrollment extension period, if it ends after that period.

The student can choose to take a global final test that evaluates all the contents of the subject. The student will choose the type of evaluation during the first quarter of the course period of the first semester. When a student does not make his/her decision through the procedure established by the faculty, it will be understood that he/she opts for continuous evaluation.

Whatever the modality is chosen by the students, it will be guaranteed that they can achieve the maximum grade "Outstanding-10".

Bibliography (basic and complementary)

Basic

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Fernández-Olaskoaga, L. et al. (2023). Uso y abuso de la tecnología en la infancia y adolescencia. El papel de la colaboración familia-escuela. En Fontana Abad, M. (Ed.) (2023). *La alianza familia-escuela y su impacto educativo. Elementos para la generación de políticas educativas basadas en la evidencia*. Narcea.

Gisbert Cervera, M., Esteve González, V., & Lázaro Cantabrana, J. L. L. (2019). *¿Cómo abordar la educación del futuro?: Conceptualización, desarrollo y evaluación desde la competencia digital docente*. Octaedro.

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Complementary

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Other resources and complementary educational materials

RELATEC – Revista Latinoamericana de Tecnología Educativa.
https://relatec.unex.es/

EmTIC – Consejería de Educación de la Junta de Extremadura.

https://emtic.educarex.es/

LabNomadis
https://labnomadis.com

Proyecto CREA

https://emtic.educarex.es/proyectocrea

INTEF - Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado - Ministerio de Educación

https://intef.es/

Centro Nacional de Desarrollo Curricular en Sistemas no Propietarios
http://cedec.educalab.es/

EducaRed https://www.fundaciontelefonica.com/educacion_innovacion/