

## COURSE PROGRAM

Academic Year: 2019/2020

Identification and characteristics of the course					
Code	FE 501615	FFP 501664/502854 (B)	CUSA 502032	ECTS Credits	6
Course name (English)	Digital, Educational and Research sources				
Course name (Spanish)	Recursos Tecnológicos Didácticos de Investigación				
Degree programs	Primary Degree				
Faculty/School	Teacher Training College Education College Santa Ana Teaching Center				
Semester	2	Type of course	Basic		
Module	Basic				
Matter	Educative Process				
Lecturer/s					
Name	Office	E-mail			
<i>Teacher Training College</i>					
María José Sosa Díaz (DOE)	1.1-B	mjosesosa@unex.es			
Jesús Valverde Berrocoso (DOE)	1.2-F	jevabe@unex.es			
M <sup>a</sup> Rosa Mateos García (DOE)	1.3-B	aliciagp@unex.es			
Jesús Acevedo Borrega (DOE)	1.1-D	jeacbo@unex.es			
Mirian Vadillo Sánchez (MIDE)	1.2-K	mivadillos@unex.es			
José María Martínez Marín (MIDE)	1.2-K	jmmartinez@unex.es			
<i>Education College</i>					
María Teresa Becerra Traver (DOE)	1.28	mbectra@unex.es			
María José Godoy Merino (DOE)	A-14	godoymerino21@unex.es			
Diego Gudiño (MIDE)	1.12	dgudiza@unex.es			
Juan de Dios González Hermosell (MIDE)	A-5	juande@unex.es			
<i>Santa Ana Teacher Center</i>					
María D. Gordillo Gordillo	4	mgordillogt@unex.es			
Subject Area	Teaching approach and School organization (DOE) Researching Methods and Diagnosis in Education (MIDE)				
Department	Sciences of Education				
Coordinating Lecturer (If more than one)	María José Sosa Díaz				

### Competencies\*

CG11. To know and apply Information and Communication technologies in the

\* The sections concerning competencies, course outline, educational activities, teaching methodologies, learning outcomes and assessment systems must conform to that included in the ANECA verified document of the degree program.

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classroom. To discern selectively Audiovisual information that contributes to apprenticeships, to civic training and cultural wealth.
CT1.3 To use new information technologies as an instrument of intellectual work and as essential element to get information, learning and communicate.
CT2.3 To update the knowledge in the socio-educational scope through the investigation and be able to analyse future trends.
CE19 To know and apply methodologies and basic techniques of educational research and be able to design innovation project identifying assessment indicators.
<b>Contents</b>
<b>Course outline*</b>
The subject has a basic, transversal and applied character. Its content focuses on the following aspects: <ul style="list-style-type: none"> <li>Technological means and resources for education</li> <li>The design and elaboration of teaching materials for the Primary School Teacher.</li> <li>Investigation in Education</li> </ul> Social and educational characteristics and impact of audiovisual and digital culture. Multimedia educational materials. Design, development and evaluation of learning teaching processes with ICT and the use of different teaching, organisational and administrative applications. Visual learning environments. Collaborative work in virtual spaces. Aspects related to the specific programs of the Junta of Extremadura in ICT. Epistemological foundation of scientific methods in educational contexts. Development of scientific research: process and fundamental concepts.
<b>Course syllabus</b>
<b>Name of lesson 1:</b> Educational Technology and Primary Education Curriculum <b>Contents of lesson 1:</b> Conceptualization of Educational Technology. Key competencies and TAC in Primary Education. Digital Literacy, Digital Gap and critical citizenship.
<b>Name of lesson 2:</b> Technological teaching resources: teaching applications and methodologies. <b>Contents of lesson 2:</b> Free Software for Primary Education. Educational use of the computer according to the purpose of the software: general purpose computer applications, educational administration and management. Virtual teaching- learning environments and Personal learning environments (PLE). Flipped classroom. Problem based-learning (PBL/ABP) and other teaching methodologies in the use of technologies in the classroom.
<b>Name of lesson 3:</b> Design and elaboration of teaching materials in digital support <b>Contents of lesson 3:</b> Conceptualization and classification of means and teaching materials. Procedure for the selection, design and development of digital teaching resources. Computer tools for the creation of teaching materials.
<b>Name of lesson 4:</b> Epistemological foundation of scientific research in Education <b>Contents of lesson 4:</b> Considerations about the concept of science. Features of educational research. Scientific guarantees in educational research. <b>Description of the practical activities of lesson 4:</b> Differences between scientific and vulgar knowledge. Inductive- Deductive. Science classification.
<b>Name of lesson 5:</b> Quantitative and qualitative methods in educational research. <b>Contents of lesson 5:</b> The research planning process. Hypothesis and variables. Sampling. Quantitative and qualitative research in education. Description of the practical activities of lesson 5: Text commentary. Classification of hypothesis and variables.

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**Name of lesson 6:** Introduction to data collection and analysis techniques and tools in educational research.  
**Contents of lesson 6:** Information collection techniques and tools. Techniques and resources for data analysis in educational research.  
 Description of the practical activities of lesson 6: Planning an investigation.

**Educational activities \***

Student workload in hours by lesson		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
<b>Assessment **</b>	2							
<b>TOTAL ECTS</b>	150	30	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\***

**Master class:** its formative value is that it can offer students a model of how to operate with knowledge to make it communicative to others and, more basically, to oneself.

**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 from peers.

**Case study:** it represents the representation of a reality situation as the basis for reflection and learning. A case-by-case approach is always a meaningful learning opportunity to the extent that those involved in your analysis manage to engage, both in the discussion of the case, and in the group process for reflection.

**Project method:** it is a learning experience that focuses on the core concepts and principles of a discipline, it involves students in solving problems and other meaningful tasks. Allows them to work autonomously to build their own learning, and culminates in actual results generated by themselves.

**Tutorial system:** it is characterized by being a flexible system. It is a modality that allows to go to the teacher at different times, depending on the student's academic needs. It relies on communication through the Virtual Campus.

\*\*\* Indicate the total number of evaluation hours of this subject.

Learning outcomes *
<ul style="list-style-type: none"> <li>• Understanding the concepts and processes and procedures and application thereof (their use in problem solving and as analytical tool of reality)</li> <li>• Ability of the student to relate and integrate the different materials and content.</li> <li>• Active participation in the practices carried out in the Seminars- Laboratory and in the Tutorials.</li> <li>• Show oral and written verbal strategies during oral presentations and monographic papers.</li> <li>• Collecting and synthesising diverse information around specific topics.</li> </ul>
Assessment systems *
<ul style="list-style-type: none"> <li>• Final assessment test- 60%</li> <li>• Continuous assessment- 40%</li> </ul> <p>The assessment of the CT 1.3 and CG11 competencies represents 67% of the final rating and the evaluation of the CT2.3 and CE19 competencies represents the 33% of the final rating.</p> <p>To pass the subject it is essential to obtain the grade of 5 in the evaluation test and/or the individual or collaborative, as well as in all the activities of the seminars comprising continuous evaluation.</p> <p>Following the new December 2016 Assessment Regulations, the student will inform the teacher in writing, the type of assessment chosen in the first three weeks of class.</p> <p>When a student does not make this communication, he or she will be deemed to opt for continuous evaluation.</p> <p>Once the type of assessment has been chosen, the student will not be able to change in the ordinary convening of that semester and will abide by the assessment regulations for extraordinary call.</p> <p>The teacher may require at the beginning of course the student's attendance at those seminars that he considers difficult to grade in the final test.</p>
Bibliography (basic and complementary)
<p>Area Moreira, M. (2004). Los medios y las tecnologías en la educación. Madrid: Pirámide.</p> <p>Area Moreira, M. (2005). La educación en el laberinto tecnológico. De la escritura a las máquinas digitales. Barcelona: Octaedro.</p> <p>Area Moreira, M. (2009). Manual electrónico. Introducción a la Tecnología Educativa. Universidad de La Laguna (España). Documento on-line:  <a href="https://campusvirtual.ull.es/ocw/file.php/4/ebookte.pdf">https://campusvirtual.ull.es/ocw/file.php/4/ebookte.pdf</a> bajo licencia Creative Commons.</p> <p>Cabero, J. (Coord.) (2007). Tecnología Educativa. Madrid: McGraw-Hill.</p> <p>Gutiérrez, P., Yuste, R., Cubo, S. y Lucero, M. (2011). Buenas prácticas en el desarrollo de trabajo colaborativo en materias TIC aplicadas a la Educación. Revista Currículum y Formación del Profesorado, 15 (1), 179-194.</p> <p>Revuelta Domínguez, F. I. y Pérez Sánchez, L. (2009). Interactividad en los entornos de formación on-line. Barcelona: UOC.</p> <p>Bibliografía Complementaria</p> <p>Alba Pastor, C. y Bautista García-Vera, A. (2004). Las nuevas tecnologías en la</p>

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Barberá, E. (2004). La educación en la red. Actividades de enseñanza y aprendizaje. Barcelona: Paidós.

Burbules, N. y Callister, T. (2001). Educación: riesgos y promesas de las nuevas tecnologías de la información. Barcelona: Granica.

Cabero J. y Gisbert, M. (2005). La formación en Internet. Guía para el diseño de materiales didácticos. Madrid: Trillas Eduforma.

Castaño, C. (dir.) (2008). La segunda brecha digital. Madrid: Cátedra-PUV-Instituto de la Mujer-MTAS.

Castells, M. (1997). La era de la información. Economía, Sociedad y Cultura. La sociedad Red (vol. 1). Madrid: Alianza Editorial.

Cebrián de la Serna, M. y Ríos Ariza, J.M. (2000). Nuevas tecnologías de la información y comunicación aplicadas a la educación. Málaga: Aljibe.

De Pablos, J., Area, M., Valverde, J. y Correa, J.M. (coords.) (2010). Buenas prácticas con TIC. Barcelona: Octaedro.

De Pablos Pons, J.(Coord.) (2009). Tecnología Educativa. La formación del profesorado en la era de Internet. Málaga: Aljibe.

Esnaola Horacek, G. (2006). Claves culturales en la construcción del conocimiento. ¿Qué enseñan los videojuegos?. Buenos Aires: Alfagrama Ediciones.

Garrido Arroyo, C., Fernández Sánchez, M. R. y Sosa Díaz, M.J. (2009). "Innovation pedagogical and ICT factors and conditions that favour good practices with ICT in primary and secondary schools". En: VV.AA. Research, reflections and innovations in integrating ITC in education. Badajoz: Formatex.

**Other resources and complementary educational materials**

RELATEC – Revista Latinoamericana de Tecnología Educativa  
<http://campusvirtual.unex.es/revistas>  
 Educ@conTIC <http://www.educacontic.es/>  
 Insitituto Nacional de Tecnologías Educativas - Ministerio de Educación  
<http://www.ite.educacion.es/>  
 Centro Nacional de Desarrollo Curricular en Sistemas No Propietarios  
<http://cedec.ite.educacion.es/>  
 EducaRed <http://www.educared.org> Zona Clic <http://clic.xtec.cat/es/jclic/>  
 Catálogo de recursos educativos web 2.0 <http://herramientasweb20.educvirtual.org/>  
 Portal LinexEdu <http://linexedu.educarex.es>  
 Centro Nacional de Referencia de Aplicación de las TIC basadas en fuentes abiertas  
<http://www.cenatic.es/>

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