



## Information about the subject

**Degree:** Bachelor of Arts Degree in Primary School Education

**Faculty:** Faculty of Teacher Training and Education Sciences

**Code:** 1162055 **Name:** New technologies and education

**Credits:** 6,00 **ECTS** **Year:** The course is not offered this academic year **Semester:** 1

**Module:** Qualifying Mention in Information and Communication Technologies

**Subject Matter:** New Technologies and Education **Type:** Elective

**Field of knowledge:** Social and legal sciences

**Department:** General Didactics, Theory of Education, and Technological Innovation

**Type of learning:** Classroom-based learning / Online

**Languages in which it is taught:**

**Lecturer/-s:**



## Module organization

### Qualifying Mention in Information and Communication Technologies

Subject Matter	ECTS	Subject	ECTS	Year/semester
New Technologies and Education	6,00	New technologies and education	6,00	This elective is not offered in the academic year 25/26
Digital technology and its implication in education	6,00	Digital technology and its application in education	6,00	This elective is not offered in the academic year 25/26
Design and evaluation of educational didactic materials	6,00	Design and evaluation of educational materials	6,00	This elective is not offered in the academic year 25/26
ICT as a didactic resource in Primary Education	6,00	ICTs as a teaching resource in primary education	6,00	This elective is not offered in the academic year 25/26
Management and innovation in new technologies in the school center	6,00	Management and innovation in new technologies in schools	6,00	This elective is not offered in the academic year 25/26

## Recommended knowledge

None



## Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

- R1      The student recognizes the historical evolution of ICT and its necessary elements
- R2      The student integrates ICT into their programming units in an appropriate manner related to key competencies
- R3      The student recognizes the different digital roles and different modes of use of ICT in the classroom
- R4      The student differentiates new emerging ICT methodologies and devices



## Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

GENERAL		Weighting			
		1	2	3	4
CG1	Understand the curricular areas of Primary Education, the interdisciplinary relationship between them, the evaluation criteria, and the body of didactic knowledge around the respective teaching and learning procedures.			X	
CG2	Design, plan, and evaluate teaching and learning processes, both individually and in collaboration with other teachers and professionals from the school.			X	
CG10	Reflect on classroom practices to innovate and improve teaching work. Acquire habits and skills for autonomous and cooperative learning and promote it among students.				X
CG11	Know and apply information and communication technologies in the classrooms. Selectively discern audiovisual information that contributes to learning, civic education, and cultural enrichment.			X	
CG12	Understand the function, possibilities, and the limits of education in today's society and the fundamental competencies that affect primary education schools and their professionals. Know the models of quality improvement applied to educational institutions.				X
SPECIFIC		Weighting			
		1	2	3	4
ETIC1	Promote positive attitudes towards the use of information and communication technologies.				X
ETIC2	Acquisition of knowledge and skills as users of existing computer and technological resources in the educational field.				X
ETIC10	Be able to train and advise the rest of the members of the educational community as users of information and communication technologies.			X	



## Assessment system for the acquisition of competencies and grading system

### In-class teaching

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R4	10,00%	Solution of practical cases: Execution tests, real and/or simulated tasks.
R1, R2, R3, R4	20,00%	Oral presentation of group and individual works: Self-assessment systems (oral, written, individual, in groups). Oral tests (individual, in groups, presentation of topics or works).
R1, R2, R3, R4	20,00%	Monitoring of student work in non-face-to-face/distance sessions: Observation techniques, rubrics, checklists. Portfolios.
R1, R2, R3, R4	10,00%	Active participation in theoretical-practical sessions, seminars, and tutorials: Attitude scale (to gather opinions, values, social and managerial skills, interaction behaviors).
R1, R2, R3, R4	40,00%	Projects. Development and/or design works.

### Observations

#### Sistema de evaluación única

De forma excepcional podrán optar a este sistema de evaluación aquellos alumnos que no puedan someterse al sistema de evaluación continua por no asistir a un mínimo del 60% de las clases.

#### Uso de inteligencia artificial

Solo se permite el uso de Inteligencia Artificial en las tareas indicadas para ello.

### Online teaching

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R4	10,00%	Solution of practical cases: Performance tests of real and/or simulated tasks.



R1, R2, R3, R4	20,00%	Exposición oral de trabajos grupales e individuales: sistemas de autoevaluación (oral, escrita, individual, en grupo). Pruebas orales (individual, en grupo, presentación de temas-trabajos)
R1, R2, R3, R4	20,00%	Monitoring of student work in non-face-to-face/distance sessions: Observation techniques, rubrics, checklists. Portfolios.
R1, R2, R3, R4	10,00%	Active participation in theoretical-practical sessions, seminars, and tutorials: Attitude scale (to gather opinions, values, social and managerial skills, interaction behaviors).
R1, R2, R3, R4	40,00%	Projects. Development and/or design works.

## Observations

### Sistema de evaluación única

Se encabezará este apartado con el siguiente texto:

De forma excepcional podrán optar a este sistema de evaluación aquellos alumnos que no puedan someterse al sistema de evaluación continua por no asistir a un mínimo del 60% de las clases. En dicho caso se evaluará de la siguiente manera: (a concretar en cada asignatura)

### Uso de inteligencia artificial

Solo se permite el uso de Inteligencia Artificial en las tareas indicadas para ello.

## CRITERIA FOR THE AWARDING OF HONOURS:

In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with 9 Distinction) may be awarded. Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.



## Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

M1	Participatory Master Class
M3	Project-based Learning
M7	Cooperative/Collaborative Work
M9	Group and Individual Tutoring
M10	Individual Tutoring
M11	Participatory Master Class
M15	Project-based Learning
M18	Cooperative/Collaborative Work
M19	Individual Tutoring
M20	Group and Individual Tutoring



## IN-CLASS LEARNING

### IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Group Work Presentation M3, M7	R1, R2, R3, R4	6,00	0,24
Theoretical Class M1	R1, R2, R3, R4	22,00	0,88
Practical Class M3, M7, M9	R1, R2, R3, R4	25,00	1,00
Tutoring M9, M10	R1, R2, R3, R4	4,00	0,16
Evaluation M10	R1, R2, R3, R4	3,00	0,12
<b>TOTAL</b>		<b>60,00</b>	<b>2,40</b>

### LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
Group work M7, M9, M10	R1, R2, R3, R4	30,00	1,20
Individual work M9, M10	R1, R2, R3, R4	60,00	2,40
<b>TOTAL</b>		<b>90,00</b>	<b>3,60</b>





## ON-LINE LEARNING

### SYNCHRONOUS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Theoretical class (e-learning mode) M11	R1, R2, R3, R4	22,00	0,88
Practical class (e-learning mode) M15, M18	R1, R2, R3, R4	31,00	1,24
Individual tutoring (e-learning mode) M19	R1, R2, R3, R4	4,00	0,16
Evaluation (e-learning mode) M19, M20	R1, R2, R3, R4	3,00	0,12
<b>TOTAL</b>		<b>60,00</b>	<b>2,40</b>

### ASYNCHRONOUS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Individual work Activities (e-learning mode) M15, M18	R1, R2, R3, R4	60,00	2,40
Group Work (e-learning mode) M15, M18	R1, R2, R3, R4	12,00	0,48
Discussion Forums (e-learning mode) M20	R1, R2, R3, R4	3,00	0,12
Asynchronous Tutoring (e-learning mode) M19	R1, R2, R3, R4	15,00	0,60
<b>TOTAL</b>		<b>90,00</b>	<b>3,60</b>



## Description of the contents

Description of the necessary contents to acquire the learning outcomes.

### Theoretical contents:

Content block	Contents
B1	Historical evolution of ICT in society. From New Technologies to ICT in the Classroom.
B2	ICT and its integration into the Primary Education curriculum: key competences, educational legislation and ICT.
B3	Emerging Technologies and Methodologies. Future Trends

### Temporary organization of learning:

Block of content	Number of sessions	Hours
B1	8,00	16,00
B2	13,00	26,00
B3	9,00	18,00



## References

- Aguirre, L. (2018). TIC en la Educación. Madrid. S.A. Marcombo.
- Ahumada, M. E. (2013) Las TIC en la formación basada en competencias. En Revista Universidad de La Salle. Ediciones Unisalle Bogotá, 60, 41-57.
- Asenjo, E. (2005). Uso pedagógico de recursos y tecnologías. Tercer Congreso Educared. Madrid. Fundación Telefónica.
- Caballero, M.A. y Díaz, Ma del R. (2003). El desarrollo de las competencias comunicativas y de alfabetización inicial. Docencia e Investigación, II Época, 13, 37-63.
- Carneiro, R., Toscano, J.C., Díaz, T. (Coords.). (2009). Los desafíos de las TIC para el cambio educativo. Colección Metas Educativas 2021. Madrid: Ediciones OEI y Fundación Santillana.
- Collis, B, Pawlowski, J. M. & Adelsberger, H.H. (2002). Handbook on Information Technologies for Education and Training. Berlin: Springer.
- Del Águila Ríos, Y., Capelo, M. R. T. F., Varela, J. M. C., Antequera, J. G., & Barroso, J. A. A. (2019). Creatividad y tecnologías emergentes en educación. Revista INFAD de Psicología. International Journal of Developmental and Educational Psychology., 3(1), 527-534.
- Grande, M., Cañón, R., & Cantón, I. (2016). Tecnologías de la información y la comunicación: evolución del concepto y características. *IJERI: International Journal of Educational Research and Innovation*, (6), 218-230.
- Moreira, M. A., Rivero, V. M. H., & Alonso, J. J. S. (2016). Modelos de integración didáctica de las TIC en el aula. *Comunicar: Revista científica iberoamericana de comunicación y educación*, (47), 79-87.
- INTEF (s.f). Marco de la competencia digital docente. Obtenido de Ministerio de Educación. [https://aprende.intef.es/sites/default/files/2018-05/2017\\_1020\\_Marco-Com%C3%BAn-de-Competencia-Digital-Docente.pdf](https://aprende.intef.es/sites/default/files/2018-05/2017_1020_Marco-Com%C3%BAn-de-Competencia-Digital-Docente.pdf)
- MEC. (s.f.). [educacionyfp.gob.es](http://www.educacionyfp.gob.es). Obtenido de Ministerio de Educación. Educación superior en España: <http://www.educacionyfp.gob.es/educacion-mecd/dms/mecd/servicios-al-ciudadano-mecd/catalogo-servicios/gestion-titulos/informacion-comun/naric/cuadro-meces.pdf>
- Trigueros Cano, F. J., Sánchez Ibáñez, R., & Vera-Muñoz, M. I. (2012). El profesorado de Educación Primaria ante las TIC: realidad y retos.



## Addendum to the Course Guide of the Subject

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject.

**Situation 1: Teaching without limited capacity** (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

**Situation 2: Teaching with limited capacity** (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

### 1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching. Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:

☒ Microsoft Teams

☐ Kaltura



## **Situation 3: Confinement due to a new State of Alarm.**

In this case, the following changes are made:

### **1. Educational Activities of Onsite Work:**

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

☒ Microsoft Teams

☐ Kaltura

Explanation about the practical sessions:



## 2. System for Assessing the Acquisition of the competences and Assessment System

### ONSITE WORK

#### Regarding the Assessment Tools:

☒ The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.

☐ The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

#### Comments to the Assessment System:



## ONLINE WORK

### Regarding the Assessment Tools:

- ☐ The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.
- ☒ The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

### Comments to the Assessment System: