



Universidad
**Católica de
Valencia**
San Vicente Mártir



ICT AND INCLUSIVE EDUCATION

SUBJECT: ICT AND INCLUSIVE EDUCATION

(3 ECTS)

UNIVERSITY MÁSTER IN TECHNOLOGICAL INNOVATION IN
EDUCATION

Catholic University of Valencia



Year 2023-2024

COURSE GUIDE OF THE SUBJECT

		ECTS
ASIGNATURA: ICT AND INCLUSIVE EDUCATION		3
Módulo: ICT in Education		9
Type of Learning ¹ : Blended Learning	YEAR: 1º Semester: 1º	
Lecturer: Dr. Carlos Máñez Carvajal	Department: Education	
	E-mail: carlos.manez@ucv.es	

MODULE ORGANIZATION

ICT AND INCLUSIVE EDUCATION	Nº ECTS 3
Duration and placement within the curriculum:	



ICT AND INCLUSIVE EDUCATION

This module will take place on the first term and will open the Master. The subject TIC in the classroom will deal with information technologies and communication. The current and future consequences derived from the use of TIC in the classroom will be analyzed during the lessons and so will be the assimilation challenges of new technologies.

New Technologies and Inclusive Education will be included in the subject TIC and Inclusive Education. New advances in TIC and Inclusive Education as well as advances in TIC and personal autonomy will also be dealt with along the subject. In the subject Free Software and Education, different licenses with which digital educative resources and contents are distributed will also be studied during the lessons. Available educative resources: licenses Creative Commons. Considerations to take into account when downloading resources and educative contents from other authors as well as needed requirements for legalizing own material.

The module, which has been assigned 9 ECTS, will start in October and end in November.

Fields and Subjects

Field	ECTS	SUBJECT	ECTS	Year/Semester
ICT in Education	9	ICT in the classroom	3	1/1
		ICT and Inclusive Education	3	1/1
		Free Software and Education	3	1/1



ICT AND INCLUSIVE EDUCATION

GENERAL AND BASIC COMPETENCES	Competence measuring scales			
	1	2	3	4
CG2 – Students should be able to adapt to new technological contexts updating contents and competences.		x		
CG3 – Students should be able to innovate their methodology using the digital competence in the classroom.				X
CG4 – Students should be able to work in teams inside and outside the classroom by means of ITC.			x	
CG5 – Students should be able to work independently, making contents summaries and issue a judgement for its further discussion and analysis in class.				X
CB6 – Students should be able to acquire and understand knowledge that provides an opportunity to be original in the development and/or application of ideas, frequently in a research context.		x		
CB8 – Students should be able to apply the acquired knowledge and face the complexity of issuing a judgement from information, which being incomplete, includes considerations about the social and ethical responsibilities derived from the appliance of their knowledge.			x	
CB9 – Students should be able to communicate their conclusions and reasons to a non-specialized and specialized audience in a clear and non ambiguous way.		x		
CB10 – Students should have learning skills that allow them to continue studying in an independent and self-directed way.				X

SPECIFIC COMPETENCES ²	Ponderación de la competencia			
	1	2	3	4

² Specific competences are evaluated from 1 to 4 following the same criterion applied to the basic and general ones.



ICT AND INCLUSIVE EDUCATION

CE1 – Students should know the scientific aspects and/or the production of technological knowledge and consider its application in an educative context.			X	
CE2 – Students should be able to understand the main peculiarities and elements of ICT to reinforce the social and working integration of the people with special needs.				X
CE4 –Students should know the risks and consequences of downloading illegal software.				X

LEARNING OUTCOMES ³	COMPETENCES
R1 Students reflects on the different integration models of ICT in education.	CE2
R2 Students knows about the several resources provided by ICT.	CE1
R3 Students understand the main peculiarities and elements of ICT to reinforce the social and working integration of people with special needs.	CE2

³ Number the learning process results consecutively.

Important note: Competences are expressed in a general sense so it is necessary to include the results of the learning process in the didactic guide. These results proof what the student is able to show at the end of the subject.



ICT AND INCLUSIVE EDUCATION

ON-CAMPUS EDUCATIONAL ACTIVITIES			
ACTIVITY	Teaching-Learning Methodology	Relation between Course and Learning Outcomes	ECTS ⁴
TEAM WORK	Activity that requires the participation of different students with a common objective, which forces them to personal interaction and the distribution and fulfilment of responsibilities, as well as the planning of meetings between the group members and the teacher. It can be combined with the use of the university e-platform.	All learning process results	0.167
ONLINE TUTORING	Personalized attention to the student in a virtual and individual way through the university e-learning platform: https://campusvirtual.ucv.es/ . It's a period of instruction and orientation carried out by a teacher which has as purpose to review and discuss the materials and issues covered in class, to help with the activities of the ongoing assessment, etc.	All learning process results	0,067
ASYNCHRONOUS OLINE SESSION	Exposition of the contents by the teacher, analysis of competences, explication and demonstration of abilities, skills and knowledge in the Virtual classroom, which requires feed-back and involvement of the students at different moments.	All learning process results	0,034

⁴ Subject is organized in on-campus activities and students' educational independent activities, with a percentage in ECTS.

Learning-teaching methodology is described generally in this guide, being specified in the different didactic units in which the subject is organized.



ICT AND INCLUSIVE EDUCATION

DISCUSSION FORUMS	<p>Discussions and opinions on-line supervised by the teacher, which allows students to express their ideas and argued opinions regarding the texts used, the questions or contents presented in class through the university</p> <p>E-learning platform.</p> <p>https://campusvirtual.ucv.es/.</p>	Todos los resultados de aprendizaje	0,43
ONGOING ASSESSMENT ACTIVITIES	<p>Commentaries, summaries, book reviews, critical analysis and development of texts, glossaries, web quests, tests, etc., which are designed in order to assess, individually or in groups, the level of acquisition of the learning outcomes of different subjects through the university e-learning platform:</p> <p>https://campusvirtual.ucv.es/</p>	R1,R2,R3	0,1
VIDEOCONFERENCE	<p>Lesson on videoconference through the university e-learning platform which involves the lecturer and students in real time.</p>	R1,R2,R3	0,067
WORKSHOP	<p>A workshop allows the gathering, evaluation and revision of students' work by means of a digital platform. The papers are sent and evaluated by the students on the online course in order to enrich the papers and mark complex tasks in a collaborative way.</p>	R1,R2,R3	0,134
Total			1



ICT AND INCLUSIVE EDUCATION

INDEPENDENT WORK ACTIVITIES OF THE STUDENT			
ACTIVITY	Teaching-Learning Methodology	Relationship between Course and Learning Outcomes	ECTS
INDEPENDENT WORK	Student study: Group or Individual preparation of readings, essays, concept maps, problem solving, seminars, papers, reports, etc. to be presented or submitted in theoretical lectures, practical and/or Small-group tutoring sessions. It can also be submitted to the university e-learning platform. https://campusvirtual.ucv.es/ .	All learning process results	1
ASYNCHRONOUS ONLINE SESSION	Exposition of the contents by the teacher, analysis of competences, explication and demonstration of abilities, skills and knowledge in the Virtual classroom, which requires feed-back and involvement of the students at different moments.	All learning process results	1
Total			2



ICT AND INCLUSIVE EDUCATION

SYSTEM FOR ASSESSING THE ACQUISITION OF THE COMPETENCES AND ASSESSMENT SYSTEM		
Assessment Tool ⁵	Assessment Tool ⁶	Assessment Tool ⁷
<p>ON-CAMPUS ATTENDANCE ASSESSMENT</p> <p>Individual monitoring of on-campus, virtual attendance and participation in activities, seminars and tutorials.</p>	<p>ON-CAMPUS ATTENDANCE ASSESSMENT</p> <p>Individual monitoring of on-campus, virtual attendance and participation in activities, seminars and tutorials.</p>	<p>ON-CAMPUS ATTENDANCE ASSESSMENT</p> <p>Individual monitoring of on-campus, virtual attendance and participation in activities, seminars and tutorials.</p>
<p>THEORETICAL AND PRACTICAL TESTS</p>	<p>THEORETICAL AND PRACTICAL TESTS</p>	<p>THEORETICAL AND PRACTICAL TESTS</p>
<p>CRITERION OF CONCESSION OF THE MENTION OF DISTINCTION:</p> <p><i>According to the University criterion, only 1 Mention of Distinction per 30 students can be given, with the exception of groups with less than 30 students where 1 Mention can be allowed.</i></p>		

DESCRIPTION OF CONTENTS	COMPETENCES
<p>Organization in contents blocks or thematic groups.</p> <p>Development of contents in didactic guides.</p>	<p>(Indicate, numerically, the related competences)</p>

⁵ Evaluation tools: speaking exam, written tests (objective tests, development tests...) monitored papers, projects, observation programmes, portfolio, etc..

⁶ Evaluation tools: speaking exam, written tests (objective tests, development tests...) monitored papers, projects, observation programmes, portfolio, etc..

⁷ Evaluation tools: speaking exam, written tests (objective tests, development tests...) monitored papers, projects, observation programmes, portfolio, etc..



ICT AND INCLUSIVE EDUCATION

New Technologies and Inclusive education	CE1, CE2,CE4
---	--------------

Organization in lesson blocks (new students).		
	DIDACTIC GUIDE	NUMBER OF LESSONS
Supporting products for Independence in learning.	Supporting products for Independence in learning.	1
Computer access	Computer access	1
Communication	Communication	1
Accessibiliy in Windows products	Accessibiliy in Windows products	1
Software Resources	Software Resources	1

BIBLIOGRAPHY
<p>Adom. (2018). <i>Adom Autonomia</i>. http://adom-autonomia.com/</p> <p>Aquari. (2022). <i>Aquari, informática para la escuela</i>. http://www.aquari-soft.com</p> <p>ARASAAC-Gobierno de Aragón. (2022). <i>AAC Symbols and shared resources—ARASAAC</i>. https://arasaac.org/</p> <p>Ceapat. Centro de Referencia Estatal de Autonomía Personal y Ayudas Técnicas. (2022). <i>Ceapat. Centro de Referencia Estatal de Autonomía Personal y Ayudas Técnicas: Inicio</i>. https://ceapat.imserso.es/ceapat_01/index.htm</p> <p>CREENA. (2022). <i>CREENA – Centro de Recursos de Educación Especial de Navarra</i>. https://creena.educacion.navarra.es/web/</p> <p>Delgado-Santos, C. I. (2012a). <i>Mi comunicador de pictogramas</i>. CEAPAT-IMSERSO.</p>



ICT AND INCLUSIVE EDUCATION

- Delgado-Santos, C. I. (2012b). *Mi software de comunicación*. CEAPAT-IMSERSO.
- Delgado-Santos, C. I., & Pérez-Castilla, L. (2015). *APPS gratuitas para el entrenamiento cognitivo y la comunicación*. CEAPAT-IMSERSO.
- Eastin Association. (2022). *EASTIN*. <http://www.eastin.eu/es-es/searches/products/index>
- European Agency for Special Needs and Inclusive Education. (2022). *European Agency for Special Needs and Inclusive Education website*. <https://www.european-agency.org/>
- Fundación ADAPTA. (2022). *Home*. <https://www.fundacionadapta.org/>
- Gómez-Alcazar, M., Máñez-Carvajal, C., & Máñez, C. (2020). Comprensión lectora nivel III. *Aquari*, 1(2), 3-5.
- Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado. (2022). *Home—INTEF*. INTEF. <https://intef.es/>
- Máñez-Carvajal, C., & Cervera-Mérida, J. F. (2021). Aplicación móvil para niños con dificultades de aprendizaje en la automatización del proceso de reconocimiento de palabras. *Información tecnológica*, 32(5), 67-74. <https://doi.org/10.4067/S0718-07642021000500067>
- Máñez-Carvajal, C., & Cervera-Mérida, J. F. (2022). Desarrollo de aplicación móvil para niños con dificultades de aprendizaje de la lectura y escritura. *Información tecnológica*, 33(1), 271-278. <https://doi.org/10.4067/S0718-07642022000100271>
- Microsoft. (2022). *Microsoft: Nube, ordenadores, aplicaciones y juegos*. <https://www.microsoft.com/es-es>
- Ministerio de Educación y Formación Profesional - Gobierno de España. (2022). *Educación Inclusiva—SGCTIE | Ministerio de Educación y Formación Profesional*. <https://www.educacionyfp.gob.es/mc/sgctie/educacion-inclusiva.html>
- Moscardó, F. M., Máñez-Carvajal, C., & Priego, I. (2020). Loto fonético. *Aquari*, 1(5), 1-3.
- NV Access Limited. (2022). *NV Access*. <https://www.nvaccess.org/>
- ONCE. (2022). *CTI – Centro de Tiflotecnología e Innovación de la ONCE*. <https://cti.once.es>
- ONDA EDUCA. (2022). *Espacio-onda*. ONDA EDUCA. <https://editorial.ondaeduca.com/>
- Orange. (2022). *Home de la página web de la Fundación Orange, conócenos*. Fundación Orange. <https://www.fundacionorange.es/>
- Qinera. (2022). *Qinera*. <https://qinera.com/es/>



ICT AND INCLUSIVE EDUCATION

TecnoAccesible. (2022). *Revista de tecnologías de apoyo y accesibilidad* | TecnoAccesible.
<https://www.tecnoaccesible.net/>

Tobii AB. (2022). *Celebrating 20 years—Global leader in eye tracking—Tobii*.
<https://www.tobii.com/>

UNESCO. (2022). *Inicio* | UNESCO. <https://www.unesco.org/es>



Addendum to the Course Guide of the Subject

MÁSTER UNIVERSITARIO EN INNOVACIÓN TECNOLÓGICA EN EDUCACIÓN

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

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 onsite activities described in this section of the Course Guide, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

☒ Microsoft Teams



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.