

Information and Communication Technologies

Code: 103841
ECTS Credits: 6

Degree	Type	Year	Semester
2501928 Audiovisual Communication	FB	2	1

Contact

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Teaching groups languages

You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject. Please note that this information is provisional until 30 November 2023.

Teachers

Celina Navarro Bosch

Prerequisites

To take this course requires a basic ability to understand concepts of physics and reading comprehension of English.

Objectives and Contextualisation

This course is part of the subject "Communication", which also includes the subjects of History of Communication, Written and Audiovisual Communication Languages, Structure of Communication and Communication Theories.

Therefore, the subject fits into the group of basic subjects related to communication, all of them with 6 credits.

The aim of this subject is to provide the basic keys to interpreting technologies and their role in society. It is an in-depth and at the same time theoretical introduction, to give the basis for reflection on technology, once the more practical subject of Technologies in Audiovisual Communication has been taught in the first year, first semester. The subject of Information and Communication Technologies is the natural continuation.

The objective of this course, as defined in the curricula, is the study of the technologies associated with the development of the information and knowledge society, considering especially their impact on innovation and on the creation of socio-cultural environments. The aim is to reflect on the role of technologies in society, citizens and the audiovisual industry.

Specifically, the objectives of the course are:

- To know and identify the main theoretical discourses on technology.
- To know the main concepts related to audiovisual technology.
- To know, identify and analyze the advantages and disadvantages of each technology related to the audiovisual transmission and reception.
- To reflect critically on the technological discourse and the application of the information and audiovisual communication technologies.

Competences

- Differentiate the discipline's main theories, fields, conceptual developments, as well as their value for professional practice.
- Manage time effectively.
- Master the technologies and languages characteristic of audiovisual communication, and those associated with discourse building.
- Research, select and arrange in hierarchical order any kind of source and useful document to develop communication products.
- Rigorously apply scientific thinking.

Learning Outcomes

1. Apply the principles and techniques of discourse building.
2. Identify the fundamental principles of audiovisual languages.
3. Identify the fundamental principles of audiovisual technology.
4. Identify the structural foundations of the audiovisual system.
5. Manage time effectively.
6. Research, select and arrange in hierarchical order any kind of source and useful document to develop communication products.
7. Rigorously apply scientific thinking.

Content

1. Conceptual Introduction to Information and Communication Technologies

What do we understand by Information and Communication Technologies? Data / Information / Knowledge.

2. Technological Discourse

Approach to the main currents that have studied technology from different perspectives, with special attention to the deterministic discourse and the constructivist one.

3. Lifecycle of Technologies

Analysis of the lifecycle of technologies in order to better understand their evolution and possible disappearance. The concept of planned obsolescence.

4. Convergence, Standardization and Digitization

Approach to convergence and divergence, digital standardization, and the impact of digitization on the audiovisual industry.

5. Artificial Intelligence and the Audiovisual Industry and creation

Definition and analysis of the phenomenon, and its impact on the industry and audiovisual creation.

Methodology

The acquisition of knowledge and skills by the students will be carried out through various methodological procedures that include theory classes, readings, seminars and tutorials, in addition to the textual and audiovisual support materials available through the Virtual Campus.

Subject content will be taught in the theory classes. Support material such as readings and audiovisual content will be used, and participation and debate with and among students will be encouraged

Small groups seminars will be held, focusing on specific topics based on previous readings and case analysis.

A group work will be carried out, relating theory with specific cases of the technological reality of the media. The work will be tutored. The detailed calendar with the content of the different sessions will be exposed on the day of presentation of the subject. It will also be posted on the Virtual Campus where students will be able to find the detailed description of the exercises and practices, the different teaching materials and any information necessary for the proper follow-up of the subject. In case of change of teaching modality for health reasons, the teacher will inform of the changes that will occur in the programming of the subject and in the teaching methodologies.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Seminars	18	0.72	
Theoretical lessons	34.5	1.38	
Type: Supervised			
Mentoring	7.5	0.3	
Type: Autonomous			
Reading, analysis and synthesis of texts, preparation and implementation of work	82.5	3.3	

Assessment

The final qualification is made up of three different parts, each of which must be approved with a minimum of 5 to pass the subject:

Group dissertation (50%)
Theoretical exams (30%)
Seminars (20%)

The work is an activity carried out in a group that will be supervised in scheduled sessions. Students must demonstrate the ability to critically read contemporary technological discourse, relating the theory of the subject with specific cases. At the beginning of the course, the protocol specifying in detail how to proceed will be posted on the virtual campus.

The theoretical exams will be ask about the theoretical lecturers, the seminars and the compulsory readings.

The intervention in the seminars will be articulated based on the guidelines that will be provided and posted on the Virtual Campus. Each seminar has a protocol and some specific readings that are known in advance. They must be prepared in advance and they will work on exercises and / or group and / or individual presentations. The absences of attendance to the seminars will be graded with a 0. At the beginning of the course the dates of the semesters will be published.

Single assessment

The single assessment is made up of three different parts, each of which must be passed with a minimum of 5 to pass the course:

- Group dissertation (40%)
- Theoretical exam (30%)
- Synthesis exercise from readings (30%)

The group dissertation is an individual activity that will be tutored with scheduled sessions. Students will have to demonstrate the ability to critically read contemporary technological discourse, relating the theory of the subject to specific cases. At the beginning of the course, the protocol that specifies in detail how to proceed will be posted.

The theoretical exam will include what has been seen and done in the theoretical class sessions, in the seminars and the compulsory readings that will have to be done throughout the course.

The synthesis exercise from readings is a face-to-face test in which the student body must compare the compulsory readings of the seminars and the theory seen in class. More details about this test will be given in the Virtual Campus.

About the period and conditions of revaluation

The student will be entitled to the revaluation of the exam and of the work or of both parties as long as it has been evaluated in 2/3 parts of the total grade of the subject.

To have access to reavalutaion of the group dissertation and / or the exam, the previous grades should be an average of 3.5.

The activities that are excluded from the revaluation process are the seminars and the synthesis exercise from readings.

About plagiarism

In the event that the student performs any irregularity that may lead to a significant variation of an evaluation act, this evaluation act will be graded with 0, regardless of the disciplinary process that could be instructed. In the event, that several irregularities occur in the evaluation acts of the same subject, the final grade for this subject will be 0

Avaluació única:

L'avaluació única està integrada per tres parts diferenciades, cadascuna de les quals s'ha d'aprovar amb un 5 com a mínim per a superar l'assignatura:

- Treball (40%)

- Examen teòric (30%)
- Exercici de síntesi a partir de lectures dels seminaris (30%)

El treball és una activitat individual que serà tutoritzada amb sessions programades. L'alumnat haurà d'evidenciar capacitat de llegir críticament el discurs tecnològic contemporani, relacionant la teoria de l'assignatura amb casos específics. A principis de curs, es penjarà el protocol que especifica amb tot detall com s'ha de procedir.

L'examen teòric inclourà el que s'ha vist i fet a les sessions teòriques de classe, als seminaris i les lectures obligatòries que s'hauran de fer al llarg del curs.

L'exercici de síntesi a partir de lectures és una prova presencial en què l'estudiantat haurà de posar en relació les lectures obligatòries dels seminaris i la teoria vista a classe. L'alumnat que esculli l'avaluació única podrà assistir com a oients als seminaris si així ho desitja. Al Campus Virtual es donaran més detalls sobre aquesta prova.

Sobre el període i condicions de la recuperació

L'alumnat tindrà dret a la recuperació de l'examen i del treball o d'ambdues parts sempre i quan hagi estat avaluat del conjunt d'activitats el pes de les quals equivalgui a un mínim de 2/3 parts de la qualificació total del'assignatura.

Per poder-se presentar a la recuperació del treball i/o de l'examen, s'haurà hagut d'obtenir una nota mitjana de l'assignatura de 3,5.

Les activitats que queden excloses del procés de recuperació són els seminaris i l'exercici de síntesi a partir de lectures (avaluació única).

Sobre el plagi

En cas que l'estudiant realitzi qualsevol irregularitat que pugui conduir a una variació significativa de la qualificació d'un acte d'avaluació, es qualificarà amb 0 aquest acte d'avaluació, amb independència del procés disciplinari que s'hi pugui instruir. En cas que es produeixin diverses irregularitats en els actes d'avaluació d'una mateixa assignatura, la qualificació final d'aquesta assignatura serà 0.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Evaluation test	30%	4	0.16	7, 1, 6, 5, 3, 4
Seminars	20%	1.5	0.06	7, 1, 6, 5, 3, 4, 2
Theoretical work	50%	2	0.08	7, 1, 6, 5, 3, 4, 2

Bibliography

Compulsory reading:

- Fernández-Quijada, David. 2011. *Medi@TIC. Anàlisi de casos de tecnologia i mitjans*. Barcelona: Editorial UOC.

Reading list:

- Anderson, Philip i Tushman, Michael (1990) "Technological Discontinuities and Dominant Designs: A Cyclical Model of Technological Change", *Administrative Science Quarterly*, 35(4): 604-633.

- Balbi, Gabriele i Paolo Maggauda (2018). *A history of digital media*. Londres: Routledge.
- Bijker, Wiebe E., Hughes, Thomas P. i Pinch, Trevor J. (eds.) (1989) *The Social construction of technological systems: new directions in the sociology and history of technology*. Cambridge (EUA): MIT Press.
- Bonet, Montse (2016). *El imperio del aire: espectro radioeléctrico y radiodifusión*. Barcelona: Editorial UOC.
- Buckland, Michael Keeble (2017). *Information and Society*. Cambridge: MIT Press.
- Carey, John i Martin C.J. Elton (2010) *When Media are New: Understanding the Dynamics of New Media Adoption and Use*. Ann Arbor: University of Michigan Press.
- Christensen, Clayton M. (2016). *The innovator's dilemma: when new technologies cause great firms to fail*, Boston, Massachusetts: Harvard Business Review Press.
- Diamond, Jared (2006). *Armas, gérmenes y acero: breve historia de la humanidad en los últimos trece mil años*, [Barcelona]: Debate.
- Henderson, Rebecca M. i Clark, Kim B. (1990) "Architectural Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms", *Administrative Science Quarterly*, 35(1): 9-30.
- Lee, Kai Fu (2018) *AI Superpowers: China, Silicon Valley, and the New World Order*. Boston: Houghton MifflinHarcourt.
- Lax, Stephen (2009) *Media and Communication Technologies. A Critical Introduction*, Basingstoke: Palgrave Macmillan.
- Lehman-Wilzig, Sam i Cohen-Avigdor, Nava. (2004) "The natural life cycle of new media evolution: Inter-media struggle for survival in the internet age", *New Media & Society*, 6(6): 707-730.
- Lievrouw, Leah A. i Livingstone, Sonia. (eds.) (2002) *Handbook of new media: social shaping and consequences of ICTs*. London: Sage.
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- Morozov, Evgeny, (2014). *To save everything, click her: the folly of technological solutionism*, New York: PublicAffairs
- Mueller, Milton (2017). *Will the Internet fragment? : sovereignty, globalization and cyberspace*. Cambridge, Polity Press.
- Niqui, Cinto. (2014) *Los primeros 20 años de contenidos audiovisuales en internet*. (E-PUB, llibre electrònic). Barcelona: Editorial UOC.
- Niqui, Cinto. (2011) *Fonaments i usos de tecnologia audiovisual digital* (E-PUB, llibre electrònic). Barcelona: Editorial UOC.
- Quintanilla, Miguel Ángel et al (2020). *Tecnologías entrañables*. Madrid: Catarata.
- Raynaud, Dominique (2018). *¿Qué es la tecnología?* Pamplona: Laetoli.
- Rogers, Everett M. (2003) *Diffusion of Innovations*, 5a ed. New York: Free Press.
- Schmidt, Eric & Cohen, Jared (2014). *El Futuro digital*, Madrid: Anaya Multimedia.
- Scolari, Carlos (2008). *Hipermediaciones. Elementos para una Teoría de la Comunicación Digital Interactiva*, Barcelona: Gedisa.
- Wu, Tim (2011). *The Master switch: the rise and fall of information empires*, New York, N.Y.: Vintage Books.

Software

None.