Euncet Business School

centro adscrito a:

UNIVERSITAT POLITÈCNICA DE CATALUNYA BARCELONATECH

TEACHING GUIDE DIGITAL TRENDS & DIGITAL ECOSYSTEM 2025-26

GENERAL DETAILS

Course Title:	Digital Trends and Digital Ecosystem
Code:	801872
Academic year:	2025-2026
Degree title:	Máster's Degree in Communication of Technology and Innovation
Number of credits (ECTS):	5
Place in the scheme of studies:	1st Semester
Date of last revision:	July 2025
Professor Responsible:	Prof. Pilar Yépez

1. GENERAL DESCRIPTION

The course "Digital Trends and Digital Ecosystem" provides a comprehensive and critical overview of the evolution, key players, technologies, and ethical and social challenges shaping today's digital environment. Students will analyze how emerging technological trends are transforming communication, exploring topics from digital behavior to innovation, creativity, and foresight.

The course emphasizes data analysis, metric interpretation, and anticipation of future scenarios to empower students for strategic and responsible decision-making in digital communication.

2. OBJECTIVES

This course aims for students to gain an in-depth understanding of the evolution and structure of the digital ecosystem, as well as the impact of emerging technologies and new consumption habits on communication. Students are expected to critically analyze the main actors, platforms, and trends that define the digital environment, interpreting the ethical, social, and regulatory challenges posed by technological transformation in society and organizations.

By the end of the course, students will be able to identify and anticipate opportunities and challenges for digital communication, select and apply relevant data analysis tools and metrics, and develop innovative and creative proposals adapted to changes in the environment.

3. LEARNING OUTCOMES

At the end of the course, the student will be able to:

Knowledge

- K3.1: Relate technological trends to the opportunities and challenges they present for digital communication strategies.
- K5.1: Describe the ethical challenges associated with technological trends and the digital ecosystem and highlight how rapid technological evolution can generate specific ethical dilemmas.
- K6.1: Analyze how understanding the structure and dynamics of the digital ecosystem is essential for addressing ethical challenges in communication.

Skills

- S01: Communicate effectively, both orally and in writing and graphically, with others about learning, the development of thought, and decision-making, and participate in debates, making use of interpersonal skills such as active listening and empathy, which foster teamwork.
- S02: Develop the ability to contribute to innovation in new or existing institutions and business organizations, through participation in creative projects and by applying skills and knowledge about entrepreneurship, organization, and business development based on technology.
- S03: Understand advanced digital technologies, so that they can be applied with a critical perspective in diverse contexts, in academic, professional, social, or personal situations.
- S7.1: Design future scenarios of technological trends to represent and predict their evolution in different contexts, allowing for a deeper interpretation of their potential impact.

Competencies

- C01: Integrate the values of sustainability, understanding the complexity of systems, in order to undertake or promote actions that restore and maintain the health of ecosystems and improve justice, thus generating visions for sustainable futures.
- C02: Identify and analyze problems that require making autonomous, informed, and reasoned decisions, to act with social responsibility, following ethical values and principles.
- C03: Develop the ability to assess inequalities based on sex and gender, in order to design solutions.
- C7.1: Investigate in depth the dynamics of the digital ecosystem to identify and understand emerging innovations and their implications in communication.
- C9.1: Apply a critical analysis of technological trends and the digital ecosystem, to proactively identify communication opportunities and challenges.

4. CONTENTS

TOPIC 1. DIGITAL ECOSYSTEM

Learning outcomes

Students will be able to:

- Define key concepts and components of the digital ecosystem.
- Analyze the historical evolution and technological milestones.
- Identify key actors and their roles in digital communication.
- Understand the impact of digital transformation on society and business.

Contents

1.1. Definition and components of the digital ecosystem: key concepts, agents, interrelations, and boundaries.
1.2. Historical evolution: from Web 1.0 to Web 3.0, technological milestones, and digital transformation.
1.3. Key actors: tech companies, platforms, content creators, influencers, and users.
1.4. Digital transformation in society and business: new forms of organization, consumption, and communication.

TOPIC 2. DIGITAL BEHAVIOR AND HABITS

Learning outcomes

Students will be able to:

- Analyze new digital consumption habits and their impact on communication.
- Understand personalization and user experience.
- Interpret the psychology of the digital consumer.
- Use tools for audience data analysis.
- Evaluate generational changes and the digital divide.

Contents

2.1. New digital consumption habits: multiscreen, on demand, attention economy, and micro-moments.
2.2. Personalization and user experience: recommendation algorithms, hyper-personalized segmentation, and UX.
2.3. Psychology of the digital consumer: motivations, biases, and decision-making in digital environments.
2.4. Audience data analysis: sources, metrics, and tools to understand digital behavior.
2.5. Generational changes and digital divide: differences in usage and access to technology.

TOPIC 3. EMERGING TECHNOLOGIES AND COMMUNICATION

Learning outcomes

Students will be able to:

- Apply knowledge of artificial intelligence in digital communication.
- Understand automation platforms and processes.
- Analyze the use of Big Data and advanced analytics.
- Understand IoT and blockchain applications in communication.
- Explore immersive experiences and new narrative formats.

Contents

4.1. Artificial intelligence applied to communication: NLP, chatbots, virtual assistants, and content generation.
4.2. Automation and marketing automation platforms.
4.3. Big Data and advanced analytics: trend prediction, sentiment analysis, and segmentation.
4.4. Internet of Things (IoT) and blockchain: applications in communication, traceability, and transparency.
4.5. Augmented reality, virtual reality, and the metaverse: immersive experiences and new narrative formats.

TOPIC 4. PLATFORMS, CHANNELS, AND NEW DISTRIBUTION FORMS

Learning outcomes

Students will be able to:

- Identify different types of digital platforms.
- Design content distribution strategies adapted to omnichannel environments.
- Analyze the creator economy and the role of influencers and digital communities.
- Understand decentralized platforms and Web3 technologies.
- Explore new digital formats and narratives.

Contents

4.1. Types of digital platforms: social, audiovisual, decentralized, and messaging.
4.2. Content distribution strategies: omnichannel and adaptation to emerging platforms.
4.3. The future of SEO: impact of AI, new forms of search (voice, visual, conversational), extreme personalization, and automation.
4.4. Content creators and the creator economy: influencers, micro-influencers, and digital communities.
4.5. New formats and narratives: podcasts, streaming, newsletters, augmented reality, and interactive experiences.

TOPIC 5. ETHICS, CHALLENGES, AND SOCIAL ISSUES

Learning Outcomes

Students will be able to:

- Analyze ethical dilemmas in digital communication.
- Understand privacy and data protection regulations.
- Evaluate sustainability and SDGs in digital communication.
- Promote inclusion, equality, and reduction of the digital divide.
- Understand the current digital legal and regulatory framework.

Contents

5.1. Ethical dilemmas in digital communication: algorithmic biases, manipulation, and misinformation.
5.2. Privacy and data protection: challenges, regulations (GDPR), and data transparency.
5.3. Sustainability and SDGs in digital communication: greenwashing, responsible communication, and impact metrics.
5.4. Inclusion, equality, and digital divide: accessibility, gender, diversity, and inclusive solutions.
5.5. Digital legal and regulatory framework: intellectual property, copyright, and new technological regulations.

TOPIC 6. DATA ANALYSIS AND METRICS IN DIGITAL COMMUNICATION

Learning outcomes

Students will be able to:

- Identify and apply key KPIs and metrics in digital communication.
- Use data analysis and visualization tools.
- Measure social and environmental impact in communication.
- Analyze trends and make predictions using AI and Big Data.
- Critically interpret data for ethical decision-making.

Contents

6.1. Main KPIs and metrics in digital communication: earned media, engagement, conversion, and reputation.
6.2. Data analysis and visualization tools: dashboards, social listening, and predictive analytics.
6.3. Measuring social and environmental impact: ESG metrics and sustainability in communication.
6.4. Trend analysis and prediction: using AI and Big Data to anticipate changes in the ecosystem.
6.5. Critical data interpretation: biases, limitations, and ethics in data-driven decision-making.

TOPIC 7. INNOVATION AND CREATIVITY IN DIGITAL COMMUNICATION

Learning Outcomes

Students will be able to:

- Apply ideation techniques and agile methodologies for creativity.
- Innovate in digital formats and narratives.
- Use AI for digital content production.
- Integrate emerging technologies into creative processes.
- Foster an innovative culture in communication teams and organizations.

Contents

7.1. Ideation and creativity techniques: design thinking, brainstorming, and agile methodologies.
7.2. Innovation in formats and narratives: digital storytelling, gamification, and immersive experiences.
7.3. Digital content production with AI.
7.4. Integration of emerging technologies in creativity: AI, AR/VR, and automation.
7.5. Fostering an innovative culture in communication teams and organizations.

TOPIC 8. FORESIGHT AND FUTURE SCENARIOS IN DIGITAL COMMUNICATION

Learning outcomes

Students will be able to:

- Apply foresight methodologies for scenario building.
- Analyze trends and make predictions using AI and Big Data.
- Evaluate change factors in the digital ecosystem.
- Identify opportunities and threats in the future of digital communication.
- Develop competencies for strategic and ethical adaptation.

Contents

8.1. Foresight methodologies: scenario building, trends, and future analysis.
8.2. Trend analysis and prediction: using AI and Big Data to anticipate ecosystem changes.
8.3. Change factors in the digital ecosystem: technology, society, economy, and regulation.
8.4. Prediction of technological and communication trends: AI, Web3, decentralization, sustainability, new audiences.
8.5. Opportunities and threats for digital communication: anticipation and strategic adaptation.

5. TEACHING AND LEARNING METHODOLOGY

The course is based on participatory lectures complemented by advance reading of the different topics. With in-class practicals and homework assignments, students are expected to reinforce the concepts and procedures presented in class.

Main activities include:

- Problem-solving, participation in debates, and case analysis.
- Practical classes with student participation, case studies, and/or exercises related to the course content.
- Group/cooperative work with the presence of the instructor.
- Individual activity in the form of a learning diary

6. EVALUATION

According to the Bologna Process, the model rewards the constant and continuous effort of students. 60% of the final grade is obtained from continuous assessment of directed activities, and the remaining 40% from the final in-person exam. The final exam has two sittings.

The final grade for the subject (FG) will be calculated using the following formula:

FG = Final Exam Grade x 40% + Continuous Assessment Grade x 60%

The minimum grade for the final exam to calculate the FG will be 40 points out of 100.
The subject is passed with a final grade equal to or greater than 50 points out of 100.

Activity type	Description	% Continuous assessment	
Course work:			50 %
Individual task	Learning diary	30%	
Final group project	Trends observatory	50%	
Project presentation	In class presentation	20%	
Test:			10%
Test	Test in class	100%	
Final exam:			40 %
	Final exam	100%	

The use of artificial intelligence (AI) tools is permitted as long as they are used as assistants for learning, information retrieval, idea generation, or improving writing. Under no

circumstances may AI be used to achieve the main objectives of the activity or to replace the student's own work. The use of AI must always be complementary and can never substitute authorship, critical analysis, or the originality required in graded activities.

It is mandatory to explicitly cite in the activity submission which AI tools have been used, for what purpose, and how they have contributed to the development of the work. Failure to provide this information will be considered a breach of academic integrity.

> *Example of citation in APA 7th edition:*
> *OpenAI. (2023). ChatGPT (version July 15, 2023) [Large language model].*
> *https://www.openai.com/chatgpt*

7. BIBLIOGRAPHY

- Dafonte-Gómez, A., & Míguez González, M. I. (Coords.). (2024). *Comunicación digital en la era de la inteligencia artificial*. Dykinson.
- Luoma-aho, V., & Badham, M. (Eds.). (2023). *Handbook on digital corporate communication*. Edward Elgar Publishing.
- Sidorenko Bautista, P. (Coord.). (2024). *Hacia una comunicación accesible en el metaverso*. UOC.
- Torres Toukoumidis, Á., & León Alberca, T. B. (Coords.). (2024). *ComunicAI. La revolución de la Inteligencia Artificial en la Comunicación*. Comunicación Social.
- Wheeler, J. (2020). *The Digital-First Customer Experience: Building a customer-centric culture in a digital-first world*. Kogan Page.