



centro adscrito a:



UNIVERSITAT POLITÈCNICA  
DE CATALUNYA  
BARCELONATECH

# **DIGITAL COMMUNICATION ENVIRONMENTS TEACHING GUIDE 2025-26**

## GENERAL INFORMATION

|                             |   |
|-----------------------------|---|
| <b>Title:</b>               | Digital Communication Environments                            |
| <b>Code:</b>                | 801871  |
| <b>Academic Year:</b>       | 2025-2026   |
| <b>Degree Program:</b>      | Máster's Degree in Communication of Technology and Innovation |
| <b>Credits (ECTS):</b>      | 5   |
| <b>Course Placement:</b>    | 1st Semester  |
| <b>Last Date Review:</b>    | June 2025   |
| <b>Course Coordinators:</b> | Prof. Anna Llacher<br>Prof. Daniel Vilosa                     |

### 1. GENERAL DESCRIPTION

---

This course provides students with both a strategic and operational perspective, as well as a comprehensive understanding of digital communication in the context of technological innovation.

Throughout the subject, students will explore how to translate business challenges into communication strategies that generate tangible value for start-ups and companies with technology at the core of their operations.

We will work on methodologies for diagnosing digital environments, defining SMART objectives, and designing narratives that simplify complex technical concepts for different stakeholders.

Students will learn how to align communication with business goals, design omnichannel content, measure its impact, and integrate emerging trends such as automation and artificial intelligence—while maintaining a critical and responsible approach to sustainability, ethics, and inclusion.

### 2. OBJECTIVES

---

By the end of the course, students will be able to:

- Align digital communication with the corporate and technological objectives of an organization.
- Develop creative content across various channels to maximize impact and differentiation.
- Implement metrics and analytics systems to enhance communication performance.
- Foster strategic thinking and data-driven decision making.

- Apply emerging technologies with a critical perspective and with sustainability and inclusion in mind.

### 3 LEARNING OUTCOMES

---

#### Knowledge

##### K1.1

Associate digital communication strategies with business goals focused on innovation and technology.

##### K3.1

Relate technological trends to communication opportunities and challenges they present for digital communication strategies.

##### K4.1

Select appropriate communication tools and digital channels for different audiences, identifying how their selection can influence the effectiveness of the message.

#### Skills

##### S01

Communicate effectively—verbally, in writing, and visually—with others about learning processes, thought development, and decision-making, and participate in debates using interpersonal skills such as active listening and empathy, which foster teamwork.

##### S02

Develop the ability to contribute to innovation in new or existing business and institutional organizations through participation in creative projects, and apply skills and knowledge related to entrepreneurship, organization, and technology-based business development.

##### S03

Understand advanced digital technologies in order to apply them critically across various contexts—academic, professional, social, or personal.

##### S4.1

Design innovative strategies that incorporate creative approaches and disruptive solutions, especially those related to omnichannel communication and marketing and aligned with the company's overall strategy.

.

##### S6.1

Differentiate and adapt communicative messages to make them understandable and relevant to all audiences, using different resources and breaking down complex topics.

## S8.2

Determine complex problems related to communication and marketing in digital environments, considering technological factors.

Competences

## C01

Integrate the values of sustainability, understanding the complexity of systems, in order to initiate or promote actions that restore and maintain ecosystem health and improve justice, thereby generating visions for sustainable futures.

## C02

Identify and analyze problems that require autonomous, informed, and well-reasoned decision-making to act with social responsibility, guided by ethical values and principles.

## C03

Develop the ability to assess inequalities based on sex and gender in order to design appropriate solutions.

## C4.1

Create content that is developed effectively across channels and platforms, ensuring consistency in message and maximizing results.

## C12.1

Generate communication and digital marketing strategies that emphasize the company's innovative component, applying creative approaches to achieve strong positioning and differentiate it in the market.

## 4. COURSE CONTENT

---

### TOPIC 1. THE CONTEXT

#### Learning outcomes

Students should be able to:

- Diagnose the communication situation of companies.
- Understand the current communication paradigm as a tool for advertising.
- Define a company's and Brand mission and vision.
- Understand tools, processes, and formats of corporate and advertising communication.

## Content

- 1.1. Contemporary and digital culture.
- 1.2. Hunting and harvesting.
- 1.3. Learning and unlearning.
- 1.4. Stirred-up creativity.
- 1.5 Attracting agencies and talent.

## TOPIC 2. BUSINESS- ORIENTED DIGITAL COMMUNICATION STRATEGIES FOR TECH COMPANIES

### Learning outcomes

After studying this topic and completing the exercises, students Will be able to:

- Diagnose the communication context for a tech company and align it with business goals.
- Design a sustainable and ethical communication value proposition.
- Justify decisions in front of executive management.

## Content

- 2.1. Diagnosis and strategic alignment with business objectives.
- 2.2. Definition of KPIs, OKRs, and key performance metrics.
- 2.3. Value proposition and positioning of a tech brand.
- 2.4. Justification and presentation to the Board.

## TOPIC 3. STORYTELLING AND INNOVATION CONTENT MARKETING

### Learning outcomes

After studying this topic and completing the exercises, students will be able to:

- Write narratives that explain complex technologies.
- Plan editorial calendars.
- Measure content impact.

## Content

- 3.1 Storytelling structures for technology.
- 3.2 Editorial calendar design and content management (theme pillars, formats, and frequencies by funnel stage).
- 3.3 Omnichannel workflow: role assignments, validation processes, and content reuse.

3.4 Content performance metrics and analytics.

3.5 Advanced formats (video-series, technical podcasts and thought leadership on LinkedIn).

## TOPIC 4. OMNICHANNEL AND INTEGRATED DIGITAL CHANNEL MANAGEMENT

### Learning outcomes

After studying this topic and completing the exercises, students will be able to:

- Design customer journeys.
- Select optimal channels.
- Ensure message consistency.

### Content

4.1. Customer journey mapping (identification of physical and digital touchpoints and moments of truth; collaborative journey mapping techniques).

4.2. Owned – Paid – Earned – Shared matrix applied to B2B and B2C models (prioritization criteria: objectives, audiences, funnel stage, and available resources).

4.3. Style guide and tone of voice (vocabulary, banned words or themes, red lines, use of emojis, content validation flows, and update protocols).

4.4. Monitoring and continuous optimization (omnichannel efficiency KPIs such as time to conversion, customer satisfaction, and Customer Lifetime Value).

## TOPIC 5. ADVANCED SOCIAL MEDIA AND TECHNOLOGICAL THOUGHT LEADERSHIP

### Learning outcomes

After studying this topic and completing the exercises, students will be able to:

- Develop campaigns focused on brand awareness and expert positioning.
- Use live and micro video formats.
- Manage communities and niche influencers.

### Content

5.1. Thought leadership and brand awareness strategies (expert positioning, content pillars, voice, and credentials).

5.2. LinkedIn Articles, X (formerly Twitter), Threads, and technical newsletters.

5.3. Live and micro video formats to scale impact (webinars, LinkedIn Live, Twitch Tech, vertical short videos such as Reels, TikTok, and YouTube Shorts).

5.4. Community management and influencer relations (criteria for selecting B2B deep-tech influencers, contractual terms, affinity, authority metrics, and content usage agreements).

## **TOPIC 6. DIGITAL COMMUNICATION METRICS, ANALYTICS, AND DASHBOARDS**

### **Learning outcomes**

After studying this topic and completing the exercises, students will be able to:

- Define KPIs aligned with business objectives.
- Build dashboards.
- Present results clearly.

### **Content**

6.1. KPI models aligned with business goals (OKR frameworks for digital communication, translation of corporate goals into awareness, conversion, and retention indicators).

6.2. Data collection (UTMs in email marketing, GA4, CRM, and social listening).

6.3. Data storytelling and visualization principles (understandable dashboards; tools such as Looker Studio or Power BI).

## **TEMA 7. COMMUNICATION AND ADVERTISING TOOLS**

### **Learning outcomes**

Students should be able to:

- Understand how to apply communication to support advertising tools -and vice versa.

### **Contents**

7.1. Branding.

7.2. Branded content.

7.3. Events.

7.4. Advertising.

7.5 Owned media and how to convert them into content.

7.6 Newsletters.

## **TOPIC 8. PERSONAL BRANDING, CONTENT CREATORS AND INFLUENCERS**

### **Learning outcomes**

Students should be able to:

- Understand how to build an audience and gain visibility through social media.

## Content

8.1 Audience management.

8.2 Personal Branding.

8.3 Personal profile.

## 5. TEACHING AND LEARNING METHODOLOGY

---

The methodology is based on participatory lecture sessions, supported by prior Reading of materials, as well as exercises and case studies that will be developed in class.

The main activities to be carried out include:

- Resolution of practical cases, participation in debates, and group dynamics.
- Group / cooperative work with the presence of the teacher.
- Autonomous study and completion of exercises.
- *Flipped classroom*: priori study of theoretical materials and practical discussion in class.
- Hands-on workshops: content creation, crisis simulations, and communication labs.
- Group consulting Project for a start-up from the UPC ecosystem.
- Analysis of real-world cases and ethical dilemmas related to communication practices.

Use of AI is permitted as an assistant, but never as a main tool to achieve the course's learning objectives.

## 6. ASSESSMENT

---

In accordance with the Bologna Plan, the assessment model rewards students' continuous and consistent effort. **60%** of the final grade is based on continuous assessment of directed activities, while the remaining **40%** comes from the final in-person exam. The final exam includes two official sittings.

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

**FG = Final Exam Grade × 40% + Continuous Assessment Grade × 60%**

To calculate the FG, students must achieve a **minimum of 40 out of 100 points** in the final exam.



The course will be passed with a **final grade equal to or greater than 50 out of 100.**

| Type of Activity   | Description           | % Continuous Assessment |      |
|--------------------|-----------------------|-------------------------|------|
| <b>Ongoing:</b>    |                       |                         | 50 % |
| Individual case    | Social media profile  | 20%                     |      |
| Team Project       | In-class presentation | 30%                     |      |
| <b>Test:</b>       |                       |                         | 10%  |
| Test               | In-class test         | 10%                     |      |
| <b>Final Exam:</b> |                       |                         | 40 % |
|                    | In-person final exam  | 40%                     |      |

## 7. BIBLIOGRAPHY

**Chaffey, D., & Ellis-Chadwick, F.** (2023). Digital Marketing. Pearson.

**Handley, A., & Chapman, C. C.** (2022). Everybody Writes (2a ed.). Wiley.

**Ryan, D.** (2024). Understanding Digital Marketing (5a ed.). Kogan Page.

**Solis, B.** (2025). Lifescale 2.0: Human-Centered Digital Transformation. Wiley.

### Additional Recommended Bibliography

**Tuten, T. L., & Solomon, M. R.** (2023). *Social Media Marketing* (4th ed.). SAGE.

A comprehensive and up-to-date reference on digital strategy, consumer behavior, and social media planning.

**Frick, T.** (2022). *Return on Engagement: Content, Strategy and Design Techniques for Digital Marketing* (2nd ed.). Focal Press.

Focuses on designing high-impact content and measuring its effectiveness across digital platforms.

**Salmon, C.** (2022). *Storytelling: Bewitching the Modern Mind*. Verso.

A critical exploration of storytelling as a tool of persuasion in contemporary communication.

**Pulizzi, J.** (2023). *Epic Content Marketing* (2nd ed.). McGraw-Hill.

A foundational guide for building powerful content strategies that engage and convert audiences.

**Newman, D.** (2024). *The Human-Centered AI Revolution*. Wiley.

Discusses the ethical integration of artificial intelligence into business and communication processes.

**Neumeier, M.** (2021). *The Brand Flip: Why Customers Now Run Companies and How to Profit from It*. New Riders.

Explains how brands must adapt to consumer-led narratives and experiences in the digital age.

**Kaushik, A.** (2022). *Web Analytics 3.0*. Self-published.

Offers an updated framework for data analysis in web environments, with a focus on decision-making.

□ **Sterne, J.** (2021). *Artificial Intelligence for Marketing: Practical Applications*. Wiley.

A hands-on introduction to applying AI tools in marketing, including automation, prediction, and personalization.