

**INFORMATION AND COMMUNICATION TECHNOLOGIES****SUBJECT:** INFORMATION AND COMMUNICATION TECHNOLOGIES**COURSE:** FIRST**PERIOD:** SECOND**TYPE:** COMPULSORY**LANGUAGE:** ENGLISH**ECTS CREDITS:** 3**SENIOR LECTURER:** Dr. Àlex Vallejo**OBJECTIVES:**

The subject *Information and Communication Technologies* allows students to understand the influence of digital technologies in social communication processes and, at the same time, the influence of social needs in the development of new technologies. It is obvious that the most effective way of communication is interpersonal and direct contact. Especially, dialogue between people sharing the same status is the paradigm of a communication process. Unfortunately, this is not always possible. In fact, people have few opportunities to be in contact to others in such a way. The history of human being is a history about overcoming the limitations of time and space in communication processes. Technology allows people to overtake these space and time limitations, and ICT—developed thanks to the Information Theory and the computing sciences—are capable to make the world immensely small and instantaneous.

In this subject, students will learn the technological, social and historical basis of ICT; the profile of their users; the features of informative and persuasive contents in the Internet, and the strategies and skills to make successful digital products. Students will be also able to produce effective contents for an online media, to optimize positioning in search-engines and to plan and manage a digital project.

## **COMPETENCES:**

### **General**

- CB2 - The students should be capable to apply the acquired knowledge to their jobs or vocations in a professional manner. Also, they should have the required competences showed through the elaboration and defence of arguments, and the resolution of problems in their area of study.
- CB4 - The students should be able to transmit information, ideas, problems and solutions to a specialized or non-specialized public.
- CG1 - The students should be competent enough to develop linguistic abilities and to express themselves in a proper and convincing way in any communicative situation, both in oral or written forms, in the community's own languages and in English.
- CG4 - The students should be capable to design and develop new ideas and projects based on new concepts and methodologies.

- CG8 - The students should be able to use the new information and communication tools to express themselves in different technological environments, using specific programs.

**Specific**

- CE6 - The students should be able to listen, negotiate, persuade and communicate effectively (in both oral and written forms), using the specific media of the business field, like the elaboration and presentation of reports about the particular situations of advertising and public relations.

**LEARNING RESULTS**

- R1 - Using blogs as a communication and promotion tool.
- R2 - Planning a Search Engine Marketing campaign.
- R3 - Writing effective texts for an online media.
- R4 - Analysing the main features of the Internet users.
- R5 - Applying the basic principles of the Search Engine Optimization.
- R6 - Applying the acquired knowledge to solve problems in complex or specialized working environments requiring innovative and creative ideas.
- R7 - Communicating in a concrete and clear way knowledge, methodology, ideas, problems and solutions related to the field of study to any type of audiences (specialized or not).

## **CONTENT**

### **1. Basis (2 h)**

The Internet

Businesses digital transformation

### **2. Website (4 h)**

Website managing & responsibilities

Historical evolution

Web pages & landing pages

Usability and Information Architecture

### **3. Users insights (2 h)**

New needs, new technologies

Evolution of digital marketing

Basic profiling. Information Society & digital divide

Advanced profiling. Web cookies.

High quality profiling. Big data and Artificial intelligence

### **4. Digital user devices (2 h)**

ICT concepts

Internet of People. Digital devices evolution, digital identity and online reputation

Digital Marketing uses for every digital device

## **5. Strategies for digital inbound marketing (2 h)**

Marketing Plan. Digital strategy

Digital Marketing: inbound marketing

Content strategies

## **6. Marketing in search engines (4 h)**

Internet search engines

Positioning in search engines: SEO

Marketing in search engines: SEM

## **7. Digital channels (4 h)**

Blogs

Email marketing

Social Media

Communication management tools

## **EVALUATION SYSTEM:**

The evaluation is based on one exam (40% of the final mark), activities in class and at home (50%) and participation in class and autonomous work (10%).

Evaluation system	Weight (%)	Learning Results	Skills	Time Commitment (hours)
<b>1 Individual activity</b> (mandatory & without remedial) *	15%	R3+R4+R6	CB2+CB4+CG1+CG4+CG8+CE6	5 hours
<b>1 Work group activity</b> (optional & without remedial) *	10%	R3+R4+R6	CB2+CB4+CG1+CG4+CG8+CE6	5 hours
<b>1 Work group activity</b> (mandatory & without remedial) **	25% (80% content + 20% presentation)	R1+R2+R3+R4+R5+R6+R7	CB2+CB4+CG1+CG4+CG8+CE6	20 hours
<b>Exam</b> Chapters 1 to 4 ***	40%	R3+R4+R7	CB2+CB4+CG1+CG4+CG8+CE6	30 hours of study time
<b>Class participation</b> (without remedial)	10%	R6 + R7	CB4+CG1+CE6	30 hours of class time

The student's progress will be considered for the final grade.

\* Non-delivered individual activities have a 0 grade. Delays on individual activities deliveries are penalized -25% per day

\*\* Work group activity delays on milestones are penalized -5% per day. Work group activity must be orally defended on time to be graded

\*\*\* For those who have under 40 in the final exam, a remedial exam is available if developed a good continuous evaluation accomplishing all requirements to take the Complimentary exam.

It is needed both an overall average of 50+ (exam, activities & class participation) and to have over 40+ in the exam, in order to pass the subject.

Evaluation is subject to remedial exam. The activities cannot be retrievable. The only items that are possible to be recovered are both exams

The final grade might be rounded upwards or downwards depending upon the effort shown in the continuous evaluation

### **METHODOLOGY:**

This subject is based on face-to-face lessons and combines theoretical knowledge with practices. During the classes, the professor will expose the contents of the programme using different learning methodologies, in addition to group activities to complement and put in practice the acquired knowledge. Additionally, the students will have to make individual activities during the personal working hours and at home.

It is strongly recommended to dedicate time at home to work on this subject to consolidate the acquired knowledge, checking the contents learnt in class and consulting the recommended bibliography. Autonomous work will be specially appreciated.

The teaching staff will consider the development and progress of each student individually.

Any student who does not sit an exam and he does not justify his absence on grounds of force majeure, either to Coordination or Academic Tutoring, will

lose this opportunity. He will be able to do it in the complementary period, but only in case he meets the requirements for it. If the student has provided a certificate of absence due to a case of force majeure, he will sit the exam on the complementary date and he will still keep another examination sitting. In case, he would not pass the exam on the complementary date, he will have another opportunity before the last day to record grades.

Any student who does not make an oral presentation and he does not justify to the teacher that it has been a case of force majeure, will lose the chance to do it another day.

Likewise, any student who does not deliver an activity on deadline and he does not justify to the teacher that it has been due to force majeure, he will miss the opportunity.

The student who, one week before the 2nd partial exam, does not have 80% attendance (having delivered the supporting documents to the course tutor in time), will lose the right to be evaluated at the ordinary convocation. You will have to go directly to the remedial exam call (as long as you comply with the requirements for assessment in remedial exams, indicated in the subject's programme).

**COMPLEMENTARY BIBLIOGRAPHY:**

Fernández Casado, Pablo (2018). Usabilidad Web. Teoría y uso. RA-MA, S.A.

Editorial y Publicaciones [ESERP online library]

Fishkin, Rand; Thomas Høgenhaven (2013). Inbound Marketing and SEO:

Insights from the Moz Blog. Willey

Halligan, Brian; Shah, Dharmesh (2010). Inbound Marketing: Get Found Using

Google, Social Media and Blogs. John Wiley & Sons

Kotler P., Kartajaya H, Setiawan I (2012). Marketing 3.0. LID editorial. ISBN:

'9788483568439 [ESERP online library]

Siegel, Eric (2016). Predictive Analytics: The Power to Predict Who Will Click,

Buy, Lie, or Die. Wiley

Somalo, N. (2017). Marketing digital que funciona. LID editorial. [ESERP online

library]

Walters, Dave (2015). Behavioral Marketing: Delivering Personalized

Experiences At Scale. John Wiley & Sons

Leiner, Barry M; Cerf, Vinton G; Clark, David D; Kahn, Robert E; Kleinrock,

Leonard; Lynch, Daniel C; Postel, Jon; Roberts, Larry G; Wolff, Stephen. Brief

history of the Internet. Internet Society.

<http://www.internetsociety.org/internet/what-internet/history-internet/brief->

[history-internet](http://www.internetsociety.org/internet/what-internet/history-internet/brief-history-internet)

### Web resources

- Search Engine Watch. <http://searchenginewatch.com>
- Internet Advertising Bureau. <http://www.iabspain.net>
- Net History. <http://www.nethistory.info>
- Internet Society. <http://www.internetsociety.org>
- MOZ. <http://www.moz.com>
- Chief Marketing Technologist - Marketing Technology Management:  
<http://chiefmartec.com>
- Nielsen Norman Group <http://www.nngroup.com>
- Analítica Web <http://www.analiticaweb.es>