CÁMARABILBAO UNIVERSITY BUSINESS SCHOOL

SYLLABUS
YEAR 2024-2025

1.- SUBJECT	
1.1.- TOPIC (ÁREA OF KNOWLEDGE)	**Information and communication technologies**
1.2.- NAME	**Advanced Information Systems**
2.- LECTURER	**Jordi Morales i Gras**
3.- GENERAL DETAILS	
3.1.- TYPE	Optional
3.2.- ECTS CREDITS	6
3.3.- YEAR	Third
3.4.- SEMESTER	Second
3.5.- LANGUAGE	English

4.- GENERAL COMPETENCIES	**CG5**	Use information and communication technologies to access information sources, to communicate, to store information and as a tool for learning and investigation, etc.
	CG12	Develop autonomy in learning and tasks and responsibility to collective commitments.
	CG16	Understand the need for lifelong learning.

5.- SPECIFIC COMPETENCIES	**CE3**	Use information and communication technology applied to management
	CE22	Know and use the new marketing tools supported by new technologies: relationship marketing, direct and interactive marketing, e-commerce etc

6.- CONTENTS	1. Digital Transformation: This section covers the theoretical definition of digital transformation and how technology plays a role in the digital economy of the 21st century. It also discusses digital and disruptive business models. 2. Data-driven Companies: This section covers the concept of information inside corporations, the informational pyramid, business informational systems, information technologies in business, and informational and data-related roles in companies. 3. Tools and Techniques for Digital Transformation: This section covers topics such as business analytics to business intelligence, big data, small data, and good data, artificial intelligence and machine learning in business, and related technologies. 4. Marketing Intelligence: This section covers the use of data in digital marketing, metrics and key performance indicators, the business intelligence cycle, data-driven marketing, and applications of marketing intelligence.
7. METHODOLOGY	1. Lectures, in which general and specific skills are worked on from a theoretical point of view and using reference examples. 2. Practical exercises, individual and in group, where general and specific skills are worked on from a practical point of view.
8.- LEARNING OUTCOMES	- Know how to identify the areas of value contribution of information technologies and the digital transformation proposal.
	- Being able to develop functional design proposals in the field of digitization to generate value in the company.

9.- EVALUATION	Criteria	Competencies	Value (%)

CRITERIA	Group work deliveries	CG5, CG12, CG16, CE3, CE22	30%
	Individual mid-term written tests	CG5, CG12, CG16, CE3, CE22	30%
	Individual written final test	CG5, CG12, CG16, CE3, CE22	15%
	Individual deliveries based on practical workshops	CG5, CG12, CG16, CE3, CE22	15%
	Positive attitude, attendance, and participation	CG5, CG12, CG16, CE3, CE22	10%
	TOTAL		100%

General comments

- An attendance below 85% of the scheduled classes will imply a score of 0 points in that item.
- Your results in this subject will be evaluated continuously at the first call. If you do not pass (because you do not show up or fail), you may do so by doing a single exam in the second call.
- In the event of obtaining less than 60% in any mid-term exam, this must be retaken together with the final exam.
- The group work will be carried out in teams (between 3 and 5 members per team). Up to 30% of the final grade will be evaluated and will only have value for the first call.
- The deliveries based on practical workshops will be carried out individually. Up to the 15% of the final grade will be evaluated and will only have value for the first call.
- To pass the course, you must obtain an overall grade of 50%, and no less than 35% in each exam, individual and group deliveries.

Comments on resists

To pass the subject on second call, it is necessary to pass the final written test with a minimum score of 50%. In extraordinary call, no other evaluation criteria will be required.

Comments on students from previous years

To pass the subject on third and subsequent calls, it is necessary to pass the test. In extraordinary call, no team work or will be required.

10.- BIBLIOGRAPHY	- The Information: a History, a Theory, a Flood. James Gleick, 2011. - Digital Transformation: Survive and Thrive in an Era of Mass Extinction. Thomas Siebel, 2019. - *Big Data: A Revolution That Transforms How we Work, Live, and Think.* Viktor Mayer-Schönberger, 2012. - *Reinventing Capitalism in the Age of Big Data.* Viktor Mayer-Schönberger, 2018. - Additional readings will be provided during the course.

11.- EVALUATION CRITERIA SCHEDULE

Criteria	Jan.	Feb.	Mar.	Apr.	May	Total
Group work deliveries		10%	10%		10%	30%
Individual mid-term written tests		15%		15%		30%
Individual written final test					15% to 45%	15% to 45%
Individual deliveries based on practical workshops			5%	5%	5%	15%
Positive attitude, attendance, and participation.		10%				10%
Total						**100%**