



Code - Course	721105 – Introduction to data culture				
Type	Basic training			Year	1 st
Thematic Area	Company fundamentals			Credits	6 ECTS
Professor in charge of the course			Javier Cohen Montoya		
In-class	60 hours	Teacher-led	40 hours	Individual	50 hours

BRIEF COURSE DESCRIPTION

The objective of this course is for students to acquire a clear and conscious notion about the importance of data in the hotel industry. Students will learn how to identify pain points and Key Performance Indicators (KPIs) and become familiar with using databases and spreadsheets to manage this information.

Data culture brings crucial value to the hotel industry, improving efficiency and strategic decision-making. Within the framework of sustainable development and the 2030 Agenda, effective data management allows hotels to align with the Sustainable Development Goals (SDGs) promoted by the World Tourism Organization (UNWTO). Adopting a data culture helps to optimize resources, reduce environmental impact and promote sustainable practices, contributing to a more responsible future in the tourism industry.

LEARNING OUTCOMES

The learning process designed for this course allows students to achieve the following Subject Related Learning Outcomes:

M02H4- Apply critical thinking in data analysis, questioning the validity of the data and considering possible limitations in its collection.

M02S6- Combine research and psychology data to segment different consumer groups.

Likewise, these contribute to the achievement of the following Degree Learning Outcomes: *TC04, TC05, TH09, TS01, TS03, TS08*. They are all available for consultation [in this link](#).

ACADEMIC CONTENTS

1. Foundations of data culture.

1.1. Why data culture is important.

1.1.1. History and evolution of data.

1.1.2. Efficiency in data management.

1.2. Key terms and skills in data culture.



- 1.2.1. Key terms.
 - 1.2.2. Skills needed to build a strong data culture.
- 1.3. Tools for understanding data culture.
 - 1.3.1. Comparison of tools: Excel, Ninnox, Looker, etc.
 - 1.3.2. Introduction to specific tools.
2. The importance of data in Hospitality industry.
 - 2.1. Key indicators in Hospitality industry.
 - 2.1.1. KPIs.
 - 2.1.2. Use cases in Hospitality industry.
 - 2.2. Building data models for hotels.
 - 2.2.1. Structuring and organizing sector-specific data.
 - 2.2.2. Use cases of data models applied to Hospitality.
 - 2.3. Data Democratization in Hospitality industry.
 - 2.3.1. What is data democratization and why it's important.
 - 2.3.2. Tools and use cases for democratize data access.
3. Data analysis, presentation, and ethics.
 - 3.1. Basic data analysis.
 - 3.1.1. Basic techniques and tools for data analysis.
 - 3.1.2. Introduction to descriptive statistics.
 - 3.2. Data visualization and presentation
 - 3.2.1. Creating basic tables and charts.
 - 3.2.2. Basic techniques for effective data presentation.
 - 3.3. Data ethics and security.
 - 3.3.1. Principles of privacy and ethics in data management.
 - 3.3.2. Introduction to data security: AEPD, LOPD, GDPR, LOPDGDD, and NDA.

LEARNING METHODOLOGY

The learning methodologies related to this course include a wide window of different actions to set off its learning outcomes, which mean a development of different kinds of capacities referred to the learning of processes and attitudes applicability in the organization's environment based on the following activities:

- **Quiz:** Assessment of data culture fundamentals, terminology, and effectiveness through targeted questions that encourage critical analysis using practical cases.
- **Hotel Use Case Presentation:** Students will investigate and identify pain points in a specific department of a hotel (to be chosen by them). They will propose improvement points that can be implemented by optimizing data management, supported by KPIs, data tables, and graphs.



- **Data Presentation Exercise:** Students will organize into groups and receive a dataset from various scenarios in a hotel. They will be required to interpret, reorganize, and present their findings to the class, explaining the different interpretations derived from the data.

ASSESSMENT SYSTEM

The assessment system measures the student's achievement of learning outcomes regarding the subject's learning outcomes and contents.

Students may choose continuous assessment or single assessment:

Continuous Assessment: the teaching-learning process is assessed by a continuous monitoring of the work done by the students throughout the course and a final individual examination. Students must attend classes in order to be assessed by continuous assessment.

Single Assessment: for those students who cannot come to class regularly, they can choose to be assessed by single assessment. The teaching-learning process is assessed by means of the assessment of all activities and in-person individual examination at the end of the course.

To qualify for this form of assessment, students must apply within the first 15 days of the start of the course through the assessment section of Virtual Campus.

The assessment activities planning will be public for the students from the start:

Activity	Type	Continuous	Single	Week deadline ¹
Quiz	Individual	10%	-	3rd week
Hotel use case presentation	Group	30%	40%	7th week
Data presentation exercise	Group	20%		10th week
Final exam	Individual	40%	60%	Exam week
Total		100%	100%	

To pass the course, it is mandatory to have obtained a minimum final grade of "5", as long as the student has completed the individual exam/s or work/s established in the course. This exam/s or final work/s must be graded with a minimum of "4" in order to be



able to calculate the average of all the assessment activities carried out during the course.

Revision and Reassessment of the Course

The student has the right to revise all the evidence that have been designed for the assessment of learning.

If a student fails to achieve the learning objectives of the course, in order to opt for the subject reassessment, it will be necessary to have obtained a final grade of the subject between "4-4.9", and to have attended the individual final exam/s or final work/s of the course.

The reassessment process will only involve the modification of the final grade in case that the new assessment activity is passed and, in any case, the maximum grade will be "5". This grade will be averaged with the other grades of the assessment activities carried out by the student during the corresponding academic period, considering the percentages established in each subject, setting the final grade for the course.

REFERENCES

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