

Interdisciplinary didactic unit IT and logistics



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1. Interdisciplinary didactic unit IT & Logistics		Duration: 20,5 hours			
<p>Learning outcomes:</p> <p>LO1: Understanding the concept of value chain and the roles of IT and logistics in it</p> <p>LO2: Understanding the interdependences existing between the IT and logistics departments in a value chain</p> <p>LO3: Apply different IT tools in order to improve the logistics operations in a value chain</p> <p>LO4: Being able to work as a team with peers from different technical backgrounds in order to solve a common challenge</p>					
CONTENTS		Groups of Learning Outcomes			
		1 Value chain	2 Interdependence	3 IT and logistics	4 Interdisciplinary cooperation
THEORETICAL CONCEPTS	<ul style="list-style-type: none"> - Definition of value chain, according to Michael Porter's model - Primary activities and support activities in a value chain - The impact of digitalization in the value chain - The impact of IT on logistics - Study cases in the application of IT tools in logistics operations 	X	X	X	
PRACTICE	<ul style="list-style-type: none"> - Understanding the challenge given (based on a possible real case of a company) - Setting the parameters necessary to solve the challenge - Researching different IT solutions related to logistics improvement - Propose specific IT solutions for the challenge given - Defend the solutions proposed 	X	X	X	X
ATTITUDES	<ul style="list-style-type: none"> - Methodic work planification. - Cooperation and team work attitude. - Problem solving. - Open mindness and willing to learn - Critical thinking. 		X		X

Activity A: activity As: Activity wit assessment	Learning Objetives	Activity Name	Activity description (Who, How and Purpose)	Resources	Hours	Notes (Assessment or self-assessment of activities)
A1		Introduction	Presentation of the purpose of the didactic unit and the LO to be achieved to all students (mixing IT and logistics students)	Didactic Unit	0,5	
A2	1,2,3	The value chain and the impact of digitalization.	Teacher's explanation about the concept of value chain and the activities part of it. Some pills on how digitalization is impacting the value chain of enterprises. (mixing IT and logistics students)	Power Point presentation.	2	
A3	1,2,3	Presentation of study cases on IT application in logistics	Teacher will present different study cases to show how different companies have applied IT solutions to improve their logistics operations and management (mixing IT and logistics students)	Power Point presentation.	2	
As4	1,2,3,4	Test	The students will assess how much they have learnt by answering a Kahoot in teams, with mixed students of logistics and IT. There will be a discussion at the end of the test to reflect on the learning.	Kahoot	1	It is a self-assessment activity done with Kahoot. In the discussion session, the students will have the opportunity to clarify any doubt left.
As5	1,2,3,4	Challenge	The teacher will present a challenge, based on a possible real case of a company, to students so they will need to solve it working in multidisciplinary teams of 4 (2 students from IT + 2 students from logistics). Each team will present their results in a plenary session to the whole group of teachers and students (ideally, also a company could be present during the presentation)	Document with the description of the challenge	15	The assessment will be based on a 360° system. The teacher will assess the result of the work of each team, each member of the team will self-asses him/herself and each member of the team will assess his/her peers (see "assessment criteria" below)

ASSESSMENT SHEET					
Assessment criteria	Weight in the total assessment	Excellent	Good	Fair	Poor
Findings from the challenge and solution proposed. Aspects to be considered: <ul style="list-style-type: none"> - Creativity of the solution - Feasibility of the solution - Analysis carried out of different possible solutions - Criteria to select the final solution - Guidance to implement the recommended solution 	60%				
Teamwork performance. Aspects to be considered: <ul style="list-style-type: none"> - Distribution of roles and tasks - Cooperation and contribution towards set goals - Mutual understanding and respect - Participation - Decision making - Openness - Use of members resources 	30%				
Public presentation. <ul style="list-style-type: none"> - Ability to capt audience's attention. - Clarity and briefness - Support on visual tools - Ability to answer correctly any question from the audience 	10%				