

LOGISTICS, SUPPLY CHAIN & MARITIME BUSINESS

35019 - NEW TECHNOLOGIES & LEAN LOGISTICS (SIX SIGMA, KAIZEN, SCOR)

General information

- Academic year 2023/24
- Course: First
- Trimester: First
- Number of credits: 3
- Teachers:
 - José Luis Torres Soto <jtorress@tecnocampus.cat>

Teaching languages

- English

Presentation of the subject

New Technologies and Continuous Improvement Techniques.

Competences/learning outcomes

Basic

- CB7 How to apply the knowledge acquired and the ability to solve problems in new or little-known environments within broader (or multidisciplinary) contexts related to the area of study.
- CB8 - That students be able to integrate knowledge and confront the complexity of formulating judgments based on information that, being incomplete or limited, includes reflections on the social and ethical responsibilities linked to the application of their knowledge the judgments
- CB9 How to communicate the conclusions and the knowledge and ultimate reasons that support the students to specialized and non-specialized audiences in a clear and unambiguous way
- CB10 Possess the learning skills that allow the students to continue studying in a way that will be largely self-directed or autonomous.

Specific

- CE2. Application of tools and methodologies that facilitate creative and innovative thinking in everyday situations linked in the supply chain environment, logistics, and maritime businesses.
- CE4. Strategically manage the processes of business innovation in the supply chain and the maritime business, from the diagnosis to its application, being able to align resources, abilities and abilities to put them into practice
- CE5. Design and implement logistics systems, evaluating the different possible alternatives, technical and resource constraints and taking into account coordinated management and management throughout the supply chain.
- CE8. Analyze and diagnose different problems that arise along all the nodes of the maritime business and, with the support of management tools, design and implement efficient solutions.

Transversal

- CT1. Show willingness to learn about new cultures, experience new methodologies and foster international exchange in the context of logistics, the supply chain and maritime businesses.
- CT2. Show entrepreneurial leadership and management skills that strengthen personal confidence and reduce risk aversion.
- CT3. Develop tasks by applying the acquired knowledge with flexibility and creativity and adapting them to new contexts and situations.

No data

Contents

Context and need to implement Lean processes in the logistics field.

Tools and methods

Kaizen

Deming Circle

Quality at the origin

5S method

Kanban

Tools and principles of SIX-Sigma

Value Stream Mapping (VSM)

Reporting

Balanced Scorecard Definition and use of KPIs (Key Performance Indicators) Information / Visual Control New technologies: Use and effect on Lean management of logistics activities.

Project management: planning, design and implementation of continuous improvement projects or process re-engineering. Study of communication as an essential element.

Sustainable Development Goals

- 05 - Gender equality
- 08 - Decent work and economic growth
- 04 - Quality education
- 09 - Industry, innovation and infrastructure

Evaluation system

Cases and practical activities: 80%

Exam on theoretical concepts: 20%