PROJETO I - GESTÃO DE OPERAÇÕES

Code: 20903

Main Scientific Area: Health, Environment and Industrial Technologies

Lecturer: Cátia Filipa Veiga Alves

Language of Instruction: Portuguese

Regime: S1

Contact Hours: 30h Total Workload: 130h

ECTS: 6,0

Objectives

To know methods, techniques and tools of operations management to define and improve the production systems, ensuring the efficiency and effectiveness of the processes;
To learn how to carry out a production and control plan, considering the aggregate planning, the production master plan, and materials and manufacturing resources planning.
To create an operations management project in a company.

Learning Outcomes

The contents of this curricular unit will allow students to acquire a set of skills in the area of operations management.

This course will enable students to learn about operations management methods, techniques and tools, as well as their application in the industrial environment in order to implement improvements in operations management processes.

Course Contents

Introduction to operations and productivity
Implementation and organization production resources
Lean production systems
Factory constraints management
Aggregate production planning
Capacity planning
Manufacturing requirements planning (MRP) and Manufacturing Resources Planning (MRPII)
Production scheduling
Information systems to support production
Implementation of an industrial management project.

Recommended Bibliography

Lopes, J., Pimental, B., Pinto, J., Soares, J. Nunes, S. (2020). Gestão da produção e operações. Teoria e casos práticos resolvidos. Escolar Editora.
Lisboa, J. Gomes, C. (2018). Gestão de operações. 3ª edição. Vida Económica – Editoria S.A.
Pinto, J. (2006). Gestão de operações na indústria e nos serviços. Lidel – edições téncicas, lda.
Courtois, A.,Pillet, M., Martin-Bonnefous, C. (2006). Gestão da produção. Para uma gestão industrial ágil, criativa e cooperante. Lidel – edições téncicas, lda.

Learning and Teaching Methods

The course contents are in line with the course objectives. Objective 1 is achieved through the contents of the programme 1 to 4. Objective 2 is achieved through programme contents 5 to 9. Objective 3 is achieved through programme content 10.

Assessment Methods

The calculation of the final classification will be obtained by the contribution of each of the evaluation elements:

Individual tasks (25%)

Group work (65%)
Presentation of group work (10%)For the student to obtain classification at the UC, he/she cannot have a minimum grade lower than 8 values in any of the evaluation elements (exception is applied for the participation. The student will be approved at the UC with a final grade greater than 9.5 values.
The exam only replaces the individual component of the curricular unit, and it is mandatory to submit the group work. Students can only take the exam if they have a minimum mark in the group work.

The improvement of the grade will be done through an overall written test and for the individual component. The group component will keep the grade from the continuous assessment. You can only improve your grade (in the exam) at a specific time and by registering with the academic services.