

## Operations Research\_20

Guía docente 2023-24

# INTRODUCTION

**Brief description**: This course permtis students to know some basic tools to take decisiones in the Operations Management Area. It is a practical subject where students will be able to simulate decisions linked to transporation, routing, inventory decisions or location. The mathematical complexity is low and it is open to all students interested in the field of Operations Management.

• Degree: Business Administration

• Module in the Degree Program: Module 7: Elective

Number of credits: 6 ECTS:
Year: Third, 1st semester
Type of course: Required
Instructors: Not confirmed

• Language: English

• Lecture Schedule: Not avaiable

### **COMPETENCES**

BC2

Students must know how to apply their knowledge to their work or vocation in a professional way and must have the competences that are usually demostrated by means of preparing and defending arguments and solving problems within their area of study.

BC3

Students must have the ability to gather and interpret relevant data (usually within their area of study) to make judgments that include a reflection on relevant social, scientific and ethical topics.

BC4

Students must be able to transmit information, ideas, problems and solutions to specialized and general audiences.

BC5

Students must develop the learning skills required to undertake subsequent studies with a high level of independence.

GC1

To be familiar with different areas of the theory and/or application of economic analysis.

GC2

To identify, integrate and use the knowledge acquired to argue, discuss and solve relevant problems in economics and/or business.

GC3



To prepare professional reports and/or multimedia presentations on topics related to economics and/or business.

GC4

To use independent critical reasoning on relevant topics in economics and business.

GC5

To communicate results and analysis either orally or in writing that are useful to economics and business.

GC6

To be familiar with the different contexts in which their work is carried out: the circumstances, markets and historical, legal or human context.

GC7

To analyse the process of defining and implementing goals and/or strategies in the company.

GC8

To develop expectations, describe scenarios and make estimates using relevant information for the company.

### **PROGRAMA**

- · Chapter 0: Introduction
- · Chapter 1: Quality
- · Chapter 2: Introduction to Operations Research
- · Chapter 3: Quantitative methods for decision making
- · Chapter 4: Decision trees
- · Chapter 5: Linear programming
- · Chapter 6: Network models
- · Chapter 7: Simulation

# **EDUCATIONAL ACTIVITIES**

- Theoretical-practical sessions
- Guest speakers

### **Expected workload:**

· Class attendance: 56h

· Class preparation: 140h



# **ASSESSMENT**

### **ORDINARY CALL**

The evaluation process of the subject is made up of the following items in the ordinary exam session:

- · Various activities (databases, presentations, participation, quizzes, individual and group written work): 40%.
- · Final exam 60%

To pass the course, it is important to win the final exam.

#### **EXTRAORDINAY CALL**

Various activities (databases, presentations, participation, quizzes, individual and group written work): 40%.

Final exam 60%

# **OFFICE HOURS**

## D. XXXXXXXXXXXX (mail@unav.es)

- Despacho...... Edificio. Planta .....
- Horario de tutoria:

# **BIBLIOGRAPHY AND RESOURCES**

- · Carro, R. (2014). Operations research in management.
- · Hillier, F. S., & Lieberman, G. J. (2002). Operations research. McGraw-Hill/Interamericana Editores, SA.
- · Taha, H., Meza, G., Cruz, R., & González, V. (2004). Operations Research: An investigation. Pearson Education, Mexico.