# uc3m Universidad Carlos III de Madrid

# **Operations Management**

Academic Year: ( 2022 / 2023 ) Review date: 10-05-2022

Department assigned to the subject: Business Administration Department

Coordinating teacher: ALVAREZ GIL, MARIA JOSEFA

Type: Compulsory ECTS Credits: 6.0

Year: 2 Semester: 2

# **OBJECTIVES**

## Skills and competences:

.Development of individual learning routines via the analysis of relevant texts and the collection and analysis of recent real evidence.

- . Development of group-based learning routines via group-based discussion and the oral and written presentation of work by teams.
- . Development of verbal and written communication skills.
- . Develop the ability to raise questions and answer them.

# Knowledge:

- Know and understand the objectives and strategies of the Operations Management.
- Know and understand the main concepts and models associated with quality.
- Know and understand the foundation of the design and development processes of goods and services.
- Know and understand the processes of generation of goods and services and the corresponding distribution in plant of the facilities.
- Know and understand decisions about location and capacity.
- Know the planning of the necessary resources in the generation of goods and services.
- Apply all the previous points to problem solving.

## Abilities:

- Ability to make decisions.
- Ability to work individually, prioritizing the accuracy and precision of the results.
- Capacity for teamwork.
- Ability to relate to others.
- Ability to adapt to new situations.
- Ability to accept other points of view.

## Attitudes:

- Ability to search and curiosity.
- Have an enthusiastic attitude to solve problems.
- Defend and justify certain actions.

## **DESCRIPTION OF CONTENTS: PROGRAMME**

- 1. Operations Management in context, managing Operations strategically
- 2. Project Management
- 3. Designing Business Processes and Capacity
- 4.-Total Quality Management
- 5. Capacity Design and lay-Out Planning (chapters 8 and 9)
- 6. Designing Products and Services, sustainable Operations Management
- 9. Sustainable Operations Management and Circular Economy

# LEARNING ACTIVITIES AND METHODOLOGY

Students will acquire the knowledge and skills through lectures, the handing of the work assigned by the teachers and its discussion in class. Skills and attitudes will be enhanced by the individual and teamwork performed by the students and their discussion in class. The lectures moreover will also try to open up the discussion to the students via the collective analysis of tables, graphs or texts and the use of questions and multiple choice tests on the main concepts discussed in the lecture. (AF1,AF2, AF3, MD1, MD2, MD3)

as the blended learning approach is being used more and more extensively, we will reinforce class recordings, greater use of forums, chats, tutoring, exhibitions in virtual classrooms, work, and like

## ASSESSMENT SYSTEM

In order to evaluate the knowledge, skills and abilities achieved by students of the course, we will use a continuous assessment mechanism and a final exam.

In the continuous assessment mode, two types of tests are developed:

- a.- 2 multiple-choice tests with practical content, each with a maximum score of 25% of the total grade for the subject (maximum total score: 50%)
- b.- 2 deliveries of team work, with theoretical/practical content, with a maximum score of 25% of the total grade for the subject each (maximum total score: 50%)

Those students failing to pass any of the 4 proofs can take a complementary test focusing in the corresponding four sections, i.e., test1, test2, deliveries 1, and deliveries 2.

Students need to participate in all grading components. Not participating in one or more of the grading components leads to an overall "fail" and immediately results in a final ordinary exam.

Regarding the ordinary and extraordinary final exams, both are designed to serve students who have not followed the continuous assessment. Its contents correspond to the syllabus seen during the course and the exams will consist of Theory and Practice. The weight of each of them in the composition of the final grade is as follows: THEORY 50% and PRACTICE 50%. This approach is also followed in the extraordinary examination.

The grade obtained in the ordinary exam can never lead to a final score higher than that included in the UC3M evaluation standards in this regard.

The grade obtained in the extraordinary exam may be worth up to 100% of the final grade in the extraordinary call.

% end-of-term-examination: 0
% of continuous assessment (assigments, laboratory, practicals...): 100

#### **BASIC BIBLIOGRAPHY**

- Heizer, Jay; Render, Barry, Dirección de la producción y de operaciones. Decisiones estratégicas, 11a edición , pearson, 2015

# ADDITIONAL BIBLIOGRAPHY

- Jack R. Meredith, Samuel J. Mantel Project Management: A Managerial Approach, 7th Edition, wiley, 2009
- Andrew Greasley Operations Management, 2nd Edition, Wiley, 2009
- David Bamford, Paul Forrester Essential Guide to Operations Management: Concepts and Case Notes, Wiley, 2009
- Jack R. Meredith Operations Management, 4th Edition, Wiley, 2010
- John Mangan, Chandra Lalwani, Tim Butcher Global Logistics and Supply Chain Management, Wiley, 2008
- R. Dan Reid, Nada R. Sanders Operations Management: An Integrated Approach, 4th Edition, Wiley, 2010
- Roberta Russell Operations Management: Creating Value Along the Supply Chain, 7th Edition, Wiley, 2011
- Samuel J. Mantel Project Management in Practice, Wiley, 2011