# uc3m Universidad Carlos III de Madrid

### Supply chain management

Academic Year: (2023 / 2024) Review date: 19-04-2023

Department assigned to the subject: Business Administration Department

Coordinating teacher: MONTES SANCHO, MARIA JOSE

Type: Electives ECTS Credits: 6.0

Year: Semester:

#### **OBJECTIVES**

This course aims to introduce to the students to the advance concepts of Operations Management related to Supply Chain Managements. To achieve this goal students must acquire a range of knowledge, skills and attitudes.

For knowledge, at the end of the course the student will be able to:

- To know and understand the concepts related to production and logistics systems.
- To know and indentify the problems associated to the production and logistics systems.
- To know, understand and solve qualitative and quantitative problems.
- To understand and correctly apply the technologies of information and communication technology (TIC).

In terms of general abilities or skills, the course will work:

- The ability of making decisions.
- The ability of working individually, prioritizing the precision and accuracy of results.
- The ability of working together.
- The ability of working with tools, specially Microsoft Excel application.
- The ability of interacting with others.

After completing the course, the student should have the following attitudes:

- Initiative and entrepreneurial spirit.
- An enthusiastic attitude to solve problems and justify their actions.
- A collaborative approach that will allow others to obtain information to make decisions.

#### **DESCRIPTION OF CONTENTS: PROGRAMME**

The aim of the course is to provide a more advance knowledge of operations management and to familiarize students with the new competitive environment, current trends in operations management and technical availabilities, providing an overview of the chain supply management.

Students will learn the basics concepts of supply chain management, production planning, inventory management, environmental management and the associated changes introducing when firms applies the philosophy Lean Manufacturing/Just in time, concluding with the presentation of advances and new trends in this field.

Introduction to supply chain management (SCM).

Procurement management: Relationship with suppliers.

Inventory management.

Production planning: aggregate planning and master.

Planning material requirements.

Planning enterprise resources.

Programming and control of production.

Lean Manufacturing/Just in time.

Current issues and new trends in SCM.

## LEARNING ACTIVITIES AND METHODOLOGY

The teaching method is based on lectures, team group activities, and individual work. During the lectures, the student will learn the necessary basic concepts. The team working will allow the student to apply the knowledge obtained during the classes to a particular issue.

#### ASSESSMENT SYSTEM

The evaluation system is organized as follows:

Exercises: 15% Excel project: 30% Presentations: 15%

Quizs (2): 40%. To pass the course, it is required to obtain at least 4 over 10 points in the aggregated grade of both

quizzes.

Students that do not fully complete the above four blocks of the continuous assessment must take the final exam. We will follow the rules established in the continuous assessment process norms in these cases. (NO exceptions will be applied).

% end-of-term-examination: 0

% of continuous assessment (assignments, laboratory, practicals...):

#### **BASIC BIBLIOGRAPHY**

- CHASE, R.B. & JACOBS, J.R. Operations and Supply Chain Management, Mcgraw-Hill, 2021
- CHOPRA, S. Supply Chain Management: Strategy, Planning, and Operation, Person, Global Edition, 2019
- HEIZER, J. & RENDER, B. Operations Management: Sustainability and Supply Chain Management, Pearson. Global Edition, 2016