

**COURSE DATA****Data Subject**

<b>Code</b>	35836
<b>Name</b>	Operational management: decisions and resources
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2022 - 2023

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1313 - Degree in Business Management and Administration	Faculty of Economics	3	Second term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1313 - Degree in Business Management and Administration	24 - Compulsory subjects in the pathway: operational management and logistics	Optional

**Coordination**

<b>Name</b>	<b>Department</b>
CERVER ROMERO, ELVIRA	105 - Business Administration 'Juan José Renau Piqueras'

**SUMMARY**

This course aims at contributing to understand the management of production and its relationship with the other subsystems of any organization. The contents of this course begin at the strategic level with particular reference to the production strategy as well as other important strategic decisions such as product development, design of the production process, technology decisions, long-term planning and location of the plant. It also addresses tactical production decisions such as plant layout, inventory management, JIT systems and project planning and control.



## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

### Other requirements

It is recommended to have passed previously the course on 'Fundamentals of Business Management' and "Strategic Management"

## OUTCOMES

### 1313 - Degree in Business Management and Administration

- Demonstrate capacity for analysis and synthesis.
- Have organisation and planning skills.
- Demonstrate oral and written communication skills in the native language.
- Be able to solve problems.
- Be able to make decisions.
- Be able to work in a team.
- Have critical and self-critical capacity.
- Show commitment to ethics and social responsibility.
- Manage time effectively.
- Be able to learn autonomously.
- Be able to contribute positively to raising awareness of environmental and social issues and to overcoming all forms of discrimination, as essential factors for economic development and poverty alleviation.
- Be able to coordinate activities.
- Know the characteristics of the different production or service provision systems and know how to manage them under criteria of efficiency and effectiveness in close interrelation with the other areas of the company and with its environment.

## LEARNING OUTCOMES

The process of teaching and learning of this subject should accomplish the following competences:

- Ability to apply analytical and mathematical methods to analyze economic and business problems.
- Ability to define, solve and explain complex issues.
- Ability to use language and graphics to communicate.



- Ability to implement and introduce procedures for continuous improvement in all areas of the organization.
- Ability to establish a system of corporate governance indicators
- Know how to approach goals and strategies at different levels of the organization and assess the implications and needs for achievement
- Ability to plan, organize, monitor and evaluate the implementation of corporate strategies
- Understand the rationale and operation of companies and its systemic nature and the processes and implications related to development and growth
- Recognize the key factors of business competitiveness and sustainability of economic activities
- Know the characteristics of different production systems or to provide services and manage them under the criteria of efficiency and effectiveness in close interrelationship with other areas of the company and its environment,
- Develop a critical capacity on the Spanish and international economic news.

## DESCRIPTION OF CONTENTS

### 1. OPERATIONS MANAGEMENT AND STRATEGY

- 1.1. Production and operations management
- 1.2. Operations Strategy
- 1.3. Objectives of the Operations Management
- 1.4. Current trends and challenges

### 2. PROYECT MANAGEMENT

- 2.1. Project management and its phases
- 2.2. Project scheduling and control techniques

### 3. PRODUCT DESIGN AND DEVELOPMENT

- 3.1. Concept and decisions about the product (goods and the supply of services)
- 3.2. The product design and development process.
- 3.3. Product design and development techniques
- 3.4. Design for sustainability



#### **4. THE PRODUCTION PROCESS**

- 4.1. Types of production process strategies
- 4.2. Process design in service companies
- 4.3. Process Technology
- 4.4. Redesign of processes and production for sustainability

#### **5. LAYOUT AND LOCTION OF FACILITIES**

- 5.1. Concept and types of plant distribution
- 5.2 Facility layout methods
- 5.3 Distribution of facilities in service companies
- 5.4 Location of the company: decisions and process
- 5.5 Location in virtual companies
- 5.6 Quantitative methods for location decisions

#### **6. SUPPLY CHAIN MANAGEMENT**

- 6.1 Supply chain. Fundamental concepts and subsystems
- 6.2 Decisions and dilemmas in the supply chain
- 6.3 Purchasing and supplier management
- 6.4 Supply chain problems and opportunities
- 6.5 Logistics management and distribution management
- 6.6 Ethical and sustainable management of the supply chain

#### **7. INVENTORY MANAGEMENT**

- 7.1. The role of inventory in the supply chain
- 7.2. Inventory models and associated costs
- 7.3. Inventory models with independent demand
- 7.4. JIT Inventory

#### **8. LONG AND SHORT TERM PLANNING**

- 8.1. Concept of capacity
- 8.2. Long-term planning of production capacity
- 8.3. The planning process
- 8.4. Planning and capacity management in service companies

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theory classes	30,00	100
Classroom practices	30,00	100
Development of individual work	30,00	0
Study and independent work	30,00	0
Preparing lectures	15,00	0
Preparation of practical classes and problem	15,00	0
<b>TOTAL</b>	<b>150,00</b>	

**TEACHING METHODOLOGY**

In the theory sessions, the topics of a strategic nature, eminently theoretical, will be taught, while in the practical sessions the topics of a tactical and operative nature will be explained. In both cases the student will develop and present the analysis of the proposed cases, readings and exercises.

The support materials necessary for the normal development of the teaching will be published in the virtual classroom, and after each topic, or once two topics have been completed, a continuous evaluation test will be carried out in the classroom and during normal class hours.

**EVALUATION**

The minimum passing score is 5 out of 10. The final grade will be the result of the weighted sum of the grades obtained in the synthesis exam and in the continuous evaluation, taking into account the following considerations:

**Synthesis exam: 70%**

The exam will be held on the official date designated by the Faculty of Economics within the academic calendar of the course. It will have two parts: an objective test and the development of exercises. Questions to be asked will refer to both theoretical and practical aspects of the course and, preferably, will require the student to relate different topics within the course.

The minimum score to obtain a passing grade is 5 out of 10, having to obtain at least a score of 4 out of 10 in each one of both parts; in case that, even if the sum of both parts' ratings is higher than 5, and in some of the parts of the exam the specified minimum grade is not reached, the maximum grade of the exam will be 4.5 points.





In case of not passing the synthesis exam, the maximum grade reflected in the transcript of the course's ratings will be the one resulting from weighting the grade obtained by the factor 0.7, without adding the grade of the Continuous Evaluation.

**Continuous Evaluation: 30%,**

The remaining 30% of the grade will be obtained through continuous evaluation and participation in the different activities proposed, both in the theoretical and practical sessions. Throughout the course, students will be asked to submit and/or present practical cases and exercises to be carried out individually and/or in groups, as well as to take objective evaluation tests, to be held in the classroom, within the class duration, once a topic, or two topics are finished.

The student can recover up to 60% of the continuous evaluation rating, in the second call. It will consist of solving an additional exam on the day of the second sitting, whose objective will be to check that the student has acquired the competences and skills tested in the Continuous Evaluation along the course, as per the regulations of the University of Valencia approved by the Governing Council on May 30, 2017 (ACGUV 108/2017).

**REFERENCES****Basic**

- Miranda F.J., Rubio, S. Chamorro, A. y Bañeguil, T. (2006): Manual de Dirección de Operaciones. Madrid. Thomson
- Heizer, J. & Render, B. (2009): Operations Management. New Jersey: Pearson Prentice Hall
- Chase, R. B.; Jacobs, F. R. & Aquilano, N. J. (2009). Administración de operaciones. Producción y cadena de suministros. México, D.F.: McGraw Hill
- HEIZER, J. y RENDER, B. (2015): Dirección de la Producción y de Operaciones. Decisiones Estratégicas, 11 edición, Pearson, Madrid
- HEIZER, J. y RENDER, B. (2015): Dirección de la Producción y de Operaciones. Decisiones Tácticas, 11 edición, Pearson, Madrid
- CHOPRA, S. y MEINDL, P. (2008): Administración de la cadena de suministro. Estrategia, Planeación y Operación. Pearson, Madrid. Tercera edición
- Moscoso, P. y Lago, A. (2016): Gestión de operaciones para Directivos, McGraw Hill, Madrid
- Brandon-Jones, A., Slack, N. R. (2019): Operations Management (9th ed.). Pearson Education Limited, Harlow, UK.
- Arias, D. y Minguela, B. (2018): Dirección de la producción y operaciones. Piramide



### Additional

- Domínguez Machuca, J. A.; Álvarez Gil, M. J.; García González, S.; Domínguez Machuca, M.A. & Ruíz Jiménez, A. (1995a). Dirección de operaciones. Aspectos estratégicos. Madrid: McGraw Hill
- Domínguez Machuca, J. A.; García González, S.; Domínguez Machuca, M.A.; Ruíz Jiménez, A. & Álvarez Gil, M. J. (1995b). Dirección de operaciones. Aspectos tácticos y operativos. Madrid: McGraw Hill.
- Krajewski. L.; Ritzman, L. & Malhotra, M. (2008). Administración de Operaciones (8ª ed.). México: Pearson- Prentice Hall.
- Schroeder, R., Meyer, S. & Rungtusanatham, M. (2011): Administración de operaciones. Conceptos y casos contemporáneos (5ªed.). McGraw Hill.
- Miranda F.J., Rubio, S. y Chamorro, A. (2014): Dirección de Operaciones. Casos prácticos y recursos didácticos. Paraninfo