



**COURSE DATA**

**DATA SUBJECT**

**Code:** 35836  
**Name:** Operational management: decisions and resources  
**Cycle:** Undergraduate Studies  
**ECTS Credits:** 6  
**Academic year:** 2026-27

**STUDY (S)**

Degree	Center	Acad. year	Period
1313 - Degree in Business Management and Administration	Facultat d'Economia	3	Second quarter
1313 - Degree in Business Management and Administration	Facultat d'Economia	4	Second quarter

**SUBJECT-MATTER**

Degree	Subject-matter	Character
1313 - Degree in Business Management and Administration	Compulsory subjects in the pathway: operational management and logistics	ELECTIVES
1313 - Degree in Business Management and Administration	Compulsory subjects in the pathway: operational management and logistics	ELECTIVES

**COORDINATION**

CERVER ROMERO ELVIRA

**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.

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"

## **COMPETENCES / LEARNING OUTCOMES**

### **1313 - Degree in Business Management and Administration**

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.

Be able to learn autonomously.

Be able to make decisions.

Be able to solve problems.

Be able to work in a team.

Demonstrate capacity for analysis and synthesis.

Demonstrate oral and written communication skills in the native language.

Have critical and self-critical capacity.

Have organisation and planning skills.

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.

Manage time effectively.

Show commitment to ethics and social responsibility.

## **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 types and methods of plant distribution
- 5.2 Location of the company: decisions and process
- 5.3 Location in virtual companies
- 5.4 Quantitative methods for location decisions

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

- 6.1. Concept of capacity
- 6.2. Long-term planning of production capacity
- 6.3. The planning process
- 6.4. Planning and capacity management in service companies

## **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. SUPPLY CHAIN MANAGEMENT

- 8.1 Supply chain. Fundamental concepts and subsystems
- 8.2 Decisions and dilemmas in the supply chain
- 8.3 Purchasing and supplier management
- 8.4 Supply chain problems and opportunities
- 8.5 Logistics management and distribution management
- 8.6 Ethical and sustainable management of the supply chain

### WORKLOAD

#### PRESENCIAL ACTIVITIES

Activity	Hours
Theory	30,00
Classroom practices	30,00
<b>Total hours</b>	<b>60,00</b>

#### NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	30,00
Independent study and work	30,00
Preparation of lessons	30,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
<b>Total hours</b>	<b>90,00</b>

### TEACHING METHODOLOGY

Throughout the course, the strategic, tactical and operational contents that support the contents of the subject will be taught. Likewise, the student will develop and present the analysis of the cases, readings and proposed 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

In application of article 28 of the Regulation of Linguistic Uses of the University of Valencia, the statements of the exams and exercises will be presented in the language in which the subject group has been officially offered.



Existing generative artificial intelligence (GAI) tools can be very useful for classroom learning; However, as a general rule, it is not permitted to use them to achieve the main objective of the evaluation activities. The teaching staff will explicitly indicate under what conditions and for what type of activities the use of the IAG is allowed or limited. If the student uses any generative AI tool, he/she must indicate it in the submitted work; She will present a footnote or annex in which she includes the prompt used as well as its various modifications and a fragment of the most relevant text of the response.

The minimum score to obtain the pass 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 test: 70%**

The exam will be taken on the official date that the Faculty of Economics allows for it, within the academic calendar of the course. It will be structured in two parts, that is, an objective test and the development of exercises; In any case, the questions can refer to both theoretical and practical content and preferably questions will be asked that require the student to relate various concepts of the subject.

The minimum score to pass the exam is 5 out of 10, and at least a score of 4 out of 10 must be obtained in each of the parts; In the event that, even though the sum is greater than 5, the specified minimum grade is not reached in any of the parts of the exam, the maximum grade for the exam will be 4.5 points.

If you do not pass the summary exam, the maximum grade reflected in the report will be the result of weighting the grade obtained by the factor 0.7, without adding the grade from the Continuous Assessment.

**Continuous evaluation: 30%**

The remaining 30% of the grade will be obtained through continuous evaluation. At the end of each topic or once two topics have been completed, objective continuous evaluation tests will be carried out in the classroom and during normal class hours; The final grade of the continuous evaluation will be the weighted average of the tests carried out.

The continuous evaluation will be recoverable by 60% in the second call; The recovery of the continuous evaluation will be carried out on the official date of the second call exam and will consist of an additional exam that will aim to verify that the knowledge and skills examined during the continuous evaluation have been acquired, in accordance with the regulations of the University of Valencia approved by the Governing Council on May 30, 2017 (ACGUV 108/2017).

**REFERENCES**

- Miranda F.J., Rubio, S. Chamorro, A. y Bañeguil, T. (2006): Manual de Dirección de Operaciones. Madrid. Thomson



- 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.
- 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
- 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.
- 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
- Miranda F.J., Rubio, S. y Chamorro, A. (2014): Dirección de Operaciones. Casos prácticos y recursos didácticos. Paraninfo
- 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