

## **COURSE DATA**

Data Subject		
Code	35836	
Name	Operational management: decisions and resources	
Cycle	Grade	
ECTS Credits	6.0	
Academic year	2019 - 2020	

Study (s)				
Degree	Center	Acad. year	Period	
1313 - Degree in Business Management and Administration	Faculty of Economics	3	Second term	

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

### Coordination

Name	Department
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. INTRODUCTION TO PRODUCTION MANAGEMENT

- 1.1. The concept of production and Operations Management.
- 1.2. History of operations management.
- 1.3. Major approaches to the study of Operations Management
- 1.4. Operations Management in services.

#### 2. OPERATIONS STRATEGY

- 2.1. Strategic analysis and strategic planning of production
- 2.2. Objectives of Operations Management
- 2.3. Operations strategy

### 3. PRODUCT DESIGN AND DEVELOPMENT

- 3.1. Product Concept
- 3.2. The design and product development process. The time factor
- 3.3. New design and product development techniques
- 3.4. External development of products
- 3.5. Design and development of services



#### 4. SUPPLY CHAIN MANAGEMENT

- 4.1 Supply Chain Management- Logistics: definitions and subsystems.
- 4.2 Decisions and dilemmas in the SCM
- 4.3 The management of the Supply Chain
- 4.4 Purchases Management
- 4.5 Facilities location
- 4.6 JIT

### 5. SHORT AND LONG TERM PRODUCTION PLANNNIG

- 5.1. Long-term capacity planning.
- 5.2 The Planning process
- 5.3 Aggregate production planning
- 5.4 Materials Requirements Planning (MRP)
- 5.5 Structure and functioning of the MRP

### 6. PRODUCTION PROCESS AND FACILITIES LAYOUT

- 6.1. Strategies of production processes
- 6.2. Just in Time Systems (JIT)
- 6.3. Process design in services firms
- 6.4. Analysis and design of process flow
- 6.5. Layout types.
- 6.6. Facilities layout design methods
- 6.7. Layout design in services firms

### 7. STOCK MANAGEMENT WITH INDEPENDENT DEMAND

- 7.1. Functions and types of stocks. Advantages and disadvantages of stocks
- 7.2. Nature of stocks
- 7.3. Stock managements models with independent demand.

### **8. PROJECT MANAGEMENT**

- 8.1. Project management and its phases
- 8.2. Techniques for project planning and control
- 8.3. Limitations of the PERT-CPM technique

### **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
ТОТА	L 150,00	1.20

## **TEACHING METHODOLOGY**

In the theory sessions, expository methods will be used.

In the practical sessions the student will develop and present the analysis of the exercises, cases and readings proposed.

Slides and other materials will be published in AULA VIRTUAL.

### **EVALUATION**

### Synthesis exam: 70%

The written test can combine both objective tests (test) and the development of exercises, and at least 4 out of 10 must be obtained in each of the parts of the exam. In any case, the questions can refer to both theoretical and practical contents. Preferably questions will be asked that require the student to relate various concepts of the subject. The exam will be held on the official date that the Faculty of Economics qualifies for it within the academic calendar of the course.

#### Continuous evaluation: 30%

The remaining 30% of the score will be evaluated by means of a continuous evaluation of the theoretical sessions (assistance and participation), and practical sessions (assistance, participation and resolution of cases and problems)

Students will be asked along the course to solve and present exercises and practical cases, that will be solved either individually or in teams. Furthermore, participation on the different proposed activities will be evaluated.

To pass the course, a minimum score of 5 out of 10 points is necessary. The final score will be calculated with a weighted average of the score of the synthesis exam (provided the student has got 5 or more points out of 10) and the continuous evaluation. In case the student does not pass the synthesis exam, the maximum score will be 4,5 points.



Continuous assessment activities, given their nature and their development in the classroom, are **not recoverable**, and it is not possible to design an alternative test that evaluates the acquisition of learning outcomes in the second call, which should be known by The student, and thus will be communicated to him at the beginning of the course, in accordance with 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

#### **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



### **ADDENDUM COVID-19**

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

### 1. Description of contents

All contents specified in the original Course Guide are maintained, both for theoretical and practical sessions.

#### 2.Workload

The original Course Guide asked for 30 theoretical and 30 practical class hours, of which about a 50% was pending when the distance teaching started.

Duration of theoretical classes is reduced down to 10 hours to cater for the reduced time of videoconferences or presentations, the balance of 5 hours is added to the independent work time of the student with the materials uploaded in the Virtual Classroom.

Practical sessions will last15 hours, substituting the solution of exercises in the classroom by synchronous videoconferences with the same objective.

Course timetable and class hours are maintained

### 3. Teaching methodology

Materials used in each session will be uploaded in the Virtual Classroom well in advance.

Theoretical sessions will be made by means of spoken Powerpoint presentations or synchronous BBC videoconferences with the help of the uploaded materials. Questions will be solved with the help of the videoconference chat or the Forum in the Virtual Classroom.



Practical sessions will be devoted to the solution of exercises uploaded on the Virtual Classroom, by means of synchronous BBC videoconferences

Students' queries will be dealt with through email (response is guaranteed within 48 hours' time), and in the official students's time lecturer will be available through email or the online teaching Forum.

### 4.- Evaluation

The ratings of continuous evaluation given before the State of Alarm Declaration are still valid, but their weight changes.

The weight of the continuous evaluation was 30% and is increased to 70%

The weight of the exam was 70% and is decreased to 30%

The continuous evaluation activities of the original guide still apply; case evaluation and resolution of problems. New continuous evaluation activities are added: test-type, open response and practical exercises that will be solved, on an individual basis, via Moodle.

Final exam will consist of a written test with test-type or short open-type questions and can include exercises, cases analysis and theoretical questions of concepts description or relationship analysis between concepts. Students will need to get a rating of 4 points out of 10 in this exam to add the ratings of continuous evaluation. Exam duration will be 60 minutes, and the due hour for its submittal will be marked by the Moodle application. To be admitted to the exam, students have to be logged on the Blackboard Collaborate videoconference and should keep the camera switched on and the microphone deactivated.

If any student lacks the technical resources to guarantee this connection, he/she should get in contact with the lecturer at the time this addenda is published.

### 5.- References

The same references apply, reinforced with the files already uploaded onto Moodle

The manual of Heizer and Render is available in Spanish in the Library via Trobes

