

**Operations Management**

Code: 102094  
 ECTS Credits: 6

Degree	Type	Year	Semester
2501231 Accounting and Finance	OB	3	2

**Contact**

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**Use of Languages**

Principal working language: catalan (cat)

Some groups entirely in English: No

Some groups entirely in Catalan: Yes

Some groups entirely in Spanish: No

**Teachers**

Marcelo de Rezende Veiga

**Prerequisites**

None

**Objectives and Contextualisation**

The subject considers the following teaching objectives:

Introduce the student in the functional area of Operations, in its strategic and operational dimensions.  
 Present the modern approach of the Production Management (Operations Management).  
 That the student be able to evaluate for a company, the strategic decisions of the company.  
 To train the student in the design of the layout of a production process.  
 Provide the students with the theoretical concepts and methodologies.

**Competences**

- Analysing, summarising and assessing information.
- Communicating in oral and written form in Catalan, Spanish and English, in order to be able to summarise and present the carried out project in both forms.
- Demonstrating a comprehension of the principles, structure, organisation and inner workings of companies and organisations.
- Efficiently searching information, discriminating irrelevant information.
- Issuing technical-accounting reports related to the situation of a company.
- Students must be able to adapt to changing environments.

**Learning Outcomes**

1. Analysing and summarising situations and documents.
2. Analysing, summarising and assessing information.
3. Applying quantitative techniques in order to solve concrete problems.
4. Applying the acquired knowledge in order to solve problems and make decisions about practical issues.
5. Communicating in oral and written form in Catalan, Spanish and English, in order to be able to summarise and present the carried out project in both forms.
6. Efficiently searching information, discriminating irrelevant information.
7. Producing reports on the company's efficiency.
8. Specifying interventions in order to implement a process of change.
9. Students must be able to adapt to changing environments.
10. Use the necessary tools for analysis, both quantitative and qualitative, to solve problems and take decisions on different operational levels in the company.

## Content

### THEME I - INTRODUCTION TO OPERATIONS MANAGEMENT

- Operations as a competitive advantage
- Production strategies.
- logistics system.
- Evolución.La Operations Management in service companies.

### THEME II - CAPACITY AND PERFORMANCE MEASURES

- Process capability.
- Necks botella.Planificación capacity.
- Capacity changes over time.
- Productivity.
- The concepts of use, effectiveness and efficiency of a production system.

### UNIT III - MAKING PROCESS

- Product Definition
- Types of production
- *layout*.
- Work study, time study.
- Production lines
- Balancing production lines
- industrial budgets
- Maintenance policies

### TOPIC IV - PRODUCTION PLANNING

- Hierarchy planning decisions
- The planning process
- Aggregate planning.
- The Master Production Scheduling (MPS) Plan.
- Project planning

### TOPIC V.- THE Planificació PROJECTES

- What it is a project
- Types of projects
- Temporary project planning
- Dels planning resources
- Critical Path and resource overallocation
- Project reports

### TOPIC VI - Planning material requirements

- Product definition (BOM)
- Planning material requirements (MRP I).
- End capacity planning
- Complementary planning methods

#### TOPIC VII - THE PRODUCTION SCHEDULING

- Programming Concepts (forward and backward)
- Progamación facilities focused on process
- Sequencing Jobs
- The JIT system

#### TOPIC VIII - INVENTORY MANAGEMENT WITH SEPARATE LAWSUIT

- ABC analysis i rotations
- Estocs management costs.
- EOQ model.
- Point system order (Q).
- The system fixed period (P).

#### ITEM VIII - LEAN MANUFACTURING

- Introduction
- Lean Principles
- Key elements

### Methodology

#### Goals.

To reach the indicated competences in the most natural way possible, the aim will be to make the use of a process simulator available to students. All the material in the moodle will be made available to the students. They specify some hours of specific teaching in practices that will be used

### Activities

Title	Hours	ECTS	Learning Outcomes
<hr/>			
Type: Directed			
Theoretical Classes	25.5	1.02	
laboratory practice	16	0.64	
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Type: Supervised			
Tutorials	19	0.76	
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Type: Autonomous			
Fulfillment of casses	16.5	0.66	
Study the given materials	31	1.24	
preparation of works	34	1.36	

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## Assessment

### General conditions

The subject is evaluated with two components, the Continuous assessment and the Final Test.

Continuous assessment (50% of the final grade of the subject).

The continuous evaluation contemplates the works in group.

Continuous assessment aims to provide the student with the knowledge and skills of the subject. This option requires both parties (teachers and students) an effort and a commitment that must be known and recognized.

The note of the continuous evaluation is made up of the following elements;

- Hats activity report (in group) 25%
- Delivery of project planning with Ms Project 75%
- Class participation (EXTRA) 5%

The evaluation with a note of each of these tests will be accompanied by a comment on those aspects to be improved so that there will be no formal review date.

To have the right to take the final exam you must have a minimum grade of 3 out of 10 in the continuous assessment part.

"Student" will be deemed "assessable" to indicate at least two deliveries with his or her name in the continuous assessment.

### Liberating exam

Students will be given the option to release the subject in the face of the final exam. In order to give how released this part will have to take more than 5.

Final exam (50% of the final grade of the subject).

Examination of concepts and aspects treated throughout the course. Students have in Moodle a collection of resolved problems and exams of previous years and their corrections to be able to see the types of exercises that appear. The exam will have theoretical and practical components always trying to evaluate the degree of comprehension of the subject as faithfully as possible.

### Recovery

For those students who have obtained a grade that is equal to or greater than 3.5 and less than 5 in the assessment, there will be a recovery. At the time of publication of the final qualifications the modality of the same will be announced. This recovery will be programmed in the exam calendar of the Faculty. The student who presents and passes will pass the subject with a note of 5. Otherwise he will keep the same note.

### Repeaters

Students who do the subject again may opt for the option of not doing continuous assessment in the following conditions:

Work on the hats. If he had drawn more than a 7 he keeps a 7. If he had drawn less than a 7 he keeps a 5.

Planning with Ms Project. The same conditions as for the report of the hats, but only if he had attended all the sessions.

### Notice

For this reason, they are established without prejudice to other disciplinary measures that are deemed appropriate, and in accordance with current academic regulations, that irregularities committed by a student in carrying out any of the tests will be specifically qualified;

- If both plagiarism and group work is detected, both parties will be considered responsible and will imply suspending this evaluation activity with zero (0).
- If in the group work a student is considered to have not made the contributions expected to the group, he may receive a note that is different from that of the rest of the colleagues, which can be a zero if they qualify the rest of the components.
- Out-of-date deliveries, in formats other than those required or delivered by channels other than those established will not be accepted.

Assessment activities qualified in this way and by this procedure will not be recoverable nor will they have a specific review with all the effects that this decision entails.

### Reschedule

The date of the final exam is scheduled in the assessment calendar of the Faculty.

*"The dates of evaluation activities cannot be modified, unless there is an exceptional and duly justified reason why an evaluation activity cannot be carried out. In this case, the degree coordinator will contact both the teaching staff and the affected student, and a new date will be scheduled within the same academic period to make up for the missed evaluation activity."*

**Section 1 of Article 115. Calendar of evaluation activities (Academic Regulations UAB).** Students of the Faculty of Economics and Business, who in accordance with the previous paragraph need to change an evaluation activity date must process the request by filling out an Application for exams' reschedule

[https://eformularis.uab.cat/group/deganat\\_feie/application-for-exams-reschedule](https://eformularis.uab.cat/group/deganat_feie/application-for-exams-reschedule)

## Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Final exam	50%	2	0.08	2, 4, 3, 6, 9, 10
Hats report	10 %	2	0.08	1, 2, 4, 3, 6, 8, 7, 9, 5, 10
Project creation and planning	40%	4	0.16	1, 2, 4, 3, 6

## Bibliography

- Manuals del Ms Project disponibles al propi programari així com per Youtube.
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- Companys, R. y Fonollosa, J.B. (1999): Nuevas técnicas de Gestión de stocks: MRP i JIT. 1<sup>a</sup> edición. Marcombo.
- Gaither, N y Frazier, G. (2000): Administración de Producción y Operaciones. 4<sup>a</sup> edición. Thomson Editores.
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- Schroeder, R. G. (2011): Administración de Operaciones. 5<sup>a</sup> edición. McGraw-Hill
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