Syllabus "Operations Management I"

Code: 102393 ECTS: 6

Degree	Year	Semester
950 Business Management and Administration (EHEA Degree)	3	2

Contact

Language

English

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Prerequisites

Subject development doesn't requires any knowledge prerequisites.

Obviously, all administrative requirements to course the subject must be fulfilled to enroll in the course.

Objectives

- To introduce a modern approach to Operations Management as a basement to achieve an integrated management of the company
- To place the production system as the union of procurement, manufacturing and distribution subsystems positioning itself in relation with Finance and Marketing Systems
- To introduce the strategic and operational aspects of the production function
- To know the main decision areas of the operations area
- To know the main tools used to support decisions in the operations area

Competences

- E4: Apply theoretical knowledge to improve relations with clients and suppliers, identifying the advantages and disadvantages of those relations for both sides: company and client or supplier.
- E15: Apply mathematical instruments to synthesize complex economic-business situations.
- T8: Capacity for adapting to changing environments.
- T5: Demonstrate initiative and work individually when the situation requires it.
- E16: Identify, justify and reason the appropriate decisions according to the basic parameters of a business problem.
- T12: Show motivation for carrying out quality work and sensitivity to the consequences for the environment and society.
- T4: Organize the work in terms of good time management, organization and planning.
- T3: Take decisions in situations of uncertainty, demonstrating an entrepreneurial and innovative attitude.
- T2: Select and generate the information necessary for each problem, analyse it and take decisions based on that information.
- T6: Work well in a team, being able to argue proposals and validate or reject the arguments of others in a reasoned manner.
- T9: Use of the available information technology and adaptation to new technological environments.

Learning outcomes

- 1. Apply basic modeling techniques in business decision making.
- 2. Apply algorithmic resolution techniques to optimization problems.
- 3. Capacity to adapt to changing environments.
- 4. Demonstrate initiative and work individually when the situation requires it.
- 5. Discern between alternative analysis methods and apply the appropriate quantitative tools to the resolution of business management problems.

- 6. Model business operations applying supportive quantitative techniques.
- 7. Show motivation for carrying out quality work and sensitivity to the consequences for the environment and society.
- 8. Organize the work in terms of good time management, organization and planning.
- 9. Take decisions in situations of uncertainty, demonstrating an entrepreneurial and innovative attitude.
- 10. Solve optimization problems and obtain forecasts through information systems applications.
- 11. Select and generate the information necessary for each problem, analyse it and take decisions based on that information.
- 12. Work well in a team, being able to argue proposals and validate or reject the arguments of others in a reasoned manner.
- 13. Use of the available information technology and adaptation to new technological environments.
- 14. Use forecasting techniques in a business context.

Course contents

THEME I – INTRODUCTION TO OPERATIONS MANAGEMENT

THEME II – CAPACITY AN PERFORMANCE MEASURES

THEME III – PROCESS DESIGN AND PLANNING

THEME IV – PRODUCTION PLANNING

THEME V - MATERIALS REQUIREMENT PLANNING

THEME VI - PRODUCTION SCHEDULING

THEME VII - INVENTORY MANAGEMENT FOR INDEPENDENT DEMAND PRODUCTS

THEME VIII - JUST IN TIME (JIT)

Methodology

Through the course the different chapters of the course will be developed.

Usually a series of materials and activities will have to be worked by the student prior to the classes to motivate and improve the comprehension of the subject.

Through each chapter, a series of exercises and activities will be proposed to the students to reinforce the contents. These activities will be developed by reduced groups of students.

Each week the teachers will be available some hours to attend the students individually to solve any doubts they may have (tutorial time).

Learning activities and outcomes

Activities	Hours	ECTS	Learning outcomes
Type: Directed			
Magisterial classes	45	1.8	1, 2, 5, 6, 9, 10, 11, 13, 14
Type: Supervised			
Personalized tutorial activities	7.5	0.3	1, 2, 4, 5, 6, 8, 11, 13, 14
Type: Self learning			
Study of proposed materials, exercises development and suggested activities	90	3.6	1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 13, 14

Assessment

There will be a partial exam including approximately half the contents of the subject. The final exam will include all of the contents.

At the end of the course, each professor will publish the final qualifications and the date, time and place of the exam review. In the case of a grade below 4, the student will have to course the subject again the following academic year. For those students with a grade equal or greater than 4 and smaller than 5 a second appraisal will take place. Each teacher will decide the second appraisal methodology. As a result of this second appraisal the maximum grade achieved will be 5. A student not participating in any appraisal activity will be considered as Not Presented.

Assessment activities

Activities	Weight	Hours	ECTS	Learning outcomes
Continuous appraisal	30%	5	0.2	1, 2, 5, 6, 9, 10, 11, 12, 13, 14
Final exam	70%	2.5	0.1	1, 2, 4, 5, 6, 9, 10, 11, 14

References

Basic Bibliography:

• Heizer, I. y Render, B. (2007): Operations Management. 8ª edición. Prentice-Hall.

Additional Bibliography:

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- Companys, R. y Fonollosa, J.B. (1999): Nuevas técnicas de Gestión de stocks: MRP i JIT. 1^a edición. Marcombo.
- Gaither, N y Frazier, G. (2000): Administración de Producción y Operaciones. 4ª edición. Thomson Editores.
- Greasley, A. (2005): Operations Management. 1ª edición. John Wiley & sons
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- Slack, N, Chambers, S, y otros. (1998): Operations Management. 2ª edición Ed. Pitman Publishing
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- Verge, X. y Martínez J.L.(1992): Estratégia y Sistemas de Producción de las Empresas Japonesas.
 1^a edición. Gestió 2000