Syllabus

Operations and Technologies Management

Courses:

*Titulado Superior en Dirección de Marketing y Gestión Comercial*

Academic year 2012 / 2013

<table>
<thead>
<tr>
<th>Teachers:</th>
<th>Enrique Redondo Quintana</th>
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<tbody>
<tr>
<td>Period of classes and year:</td>
<td>2\textsuperscript{nd} Semester, 4\textsuperscript{th} Year</td>
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<tr>
<td>Type of course:</td>
<td>OB Obligatory</td>
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<td>Language in which the course will be taught:</td>
<td>English</td>
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<tr>
<td>No. of credits:</td>
<td>4,5</td>
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<tr>
<td>Hours per week:</td>
<td>3</td>
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Business Management Department
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1. Teachers´ Contact details.

enricredondo@yahoo.com

2. Description of the subject.

Introduction to Operations and Technologies Management. Since Operations is considered one of the three main departments within a company, focus will be placed on the strategic thinking and planning of the operations system and its integration with the rest of the company’s systems. The management of daily operations and the new tools to run them efficiently will be analyzed as well.

3. Subject Aims.

Mission:

- The student will acquire sound knowledge of the Production Function, one of the three main functions of a company.
- Analysis of the productive system strategic vision, technologies management and integration of the different company systems.
- Study of tactics in the operations, logistics and technologies fields.
- Update of new operations and technologies management tools.

Goals:

- Strategic and tactic analysis of the Operations Function.
- Mastery of the required skills to run the Direction of the Operations Department.
- Control of the tools to manage efficiently both the productive operations and the applied technologies in the company.
- Introduction to quantitative technics and models to perform better decision making in the productive area.
- Update of new trends of Operations Management, specifically in globalization of operations.

**Transversal skills.**

- Solving problems capacity.
- Skill for applying theoretical knowledge to Business practice.
- Ability for organizing and planning.
- Self learning

**Specific skills.**

- The student will understand the importance of logistics and operations management in the economic and business context.
- The student will have the skill of understanding and analysing the different approaches of operations systems implementation.
- The student will know the importance of updated tools and technics in operations management

5. Methodology

The subject may enable the students to obtain a global vision of the operations and technologies management in the global business environment.

The explanation of the different theoretical concepts using simplified descriptive schemes, with the students' active participation should require the 65/70% of the time approximately.

The resolution of practical cases and coursework by the students, will be combined with the reading and commentary in class of actual texts (books, articles, conferences…), occupying the 30/35% of the remaining time.

Classes must be participative, combining the conceptual explanation with real examples that allow a better comprehension of the different issues.
6. Resource Materials

The documentation is based in slides, and notes when appropriate, of the different topics of the Program. As additional material there will be business examples that operate in the global environment, solved and the specific documentation previously selected, in addition of the basic and complementary bibliography that is recommended.

7. Practical Coursework

Practice cases will be used in order to apply the different concepts that will be taught in class.
Additionally, practice activities will be proposed for the students of business situations related to them.
During the semester, together with the practice cases treated in class, the realization of a work with mandatory character may be proposed. This work will be developed during the semester in workgroups of 5 students.

8. Evaluation Process

For overcoming the subject, the students must consider the following issues:

Attendance

The class attendance is necessary for the subject comprehension, so it is absolutely mandatory.

In this sense, general rules for bonus and penalty that the School has determined for the present academic year will be followed.
In Class Tests

During the course, at least one written test will be realized corresponding with the official Exam Notice of the month of June. Previously to the realization of this test, we will communicate the duration and form of it. As part of the continuous evaluation process, periodic evaluations could be made with a system that allows liberating part of the subject, if each and every one of them are passed and the rest of established requirements are fulfilled.

Mandatory Coursework

In addition to the written tests, we will also assess in the final Subject Mark the Mandatory Work if proposed, as well as the behavior and active class participation, obtaining in that way a global grade for the semester.

Other Coursework

Under proposal of teacher or student, the realization of voluntary works about current issues related to the subject will be considered.

Final Grade

The final grade of the Subject will be formed as aggregation of the written tests marks, mandatory works and the rest of works described before, as well as bonus and penalties established in the Academic Guide (apart 4.6.2) due to mandatory attendance.

The final mark is not only product of the arithmetic average of all those marks (70% written tests, 20% practice work, 10% rest of interventions) and of the aggregation of the attendance, because the teacher will assess beside other qualitative circumstances.
To liberate the content of the final Exam, the student must:

- Fulfil the requirements of the School concerning class attendance.
- Have realized and passed the corresponding continuous evaluation.
- Have an active participation in class in quantity and quality and have maintained a good behaviour in class that help the group to achieve the academic proposed objectives.

The students that have passed a part of the subject in the continuous evaluation have the right to make the Final Exam without renouncing to his mark in the continuous evaluation.

9. Subject Program

The Program presented below will be susceptible of changes depending on the progress of the subject and the normal development of the classes, aiming to optimize the learning process and utility of the described topics.

Course Main Topics

1. Operations management and logistics in the organization.
2. Supply Chain and the Consumer Efficient Response.
3. Project Control and Planning.
4. Production: Factory capability and distribution systems.
5. Distribution Management.
7. Quality standards.
8. Information Systems and Information Technologies.
Course Contents

1. Operations management and logistics in the organization.
   1.1. Logistic system. Organization chart.
   1.2. Logistic network. Dealers.
   1.3. Designing a logistic system. The commercial system.
   1.4. Replenishment and warehouse activities in the logistic network.
   1.5. Logistic costs.
   1.6. Advanced concepts in Logistics.
   1.7. New trends in Competiveness.

2. Supply Chain and the Consumer Efficient Response.
   2.1. Logistics and Supply Chain.
   2.2. Integrated Planning in the Supply Chain.
   2.3. Consumer Efficient Response.

3. Project Control and Planning.
   3.1. PERT Method.
   3.2. Minimum Cost.
   3.3. ROY Method.

4. Production: Factory capability and distribution systems.
   4.1. Production Systems.
   4.2. Productivity.
   4.3. Effectiveness and Efficiency.
   4.5. Line Balance Practical Case.
   4.7. Future Logistics.

5. Distribution Management.
   5.1. Product characteristics. List of inputs.
   5.2. MRP Materials Requirement Planning.
   5.3. MRP Practical cases.
   5.4. DRP Distribution Resource Planning.

   6.1. Inventory control.
   6.2. Orders planning.
   6.3. Checking system.
   6.4. Wilson model
   6.5. Economic lot size – EOQ Economic order quantity.
7. Quality standards.

7.2. Quality awards. Deming and Baldrige.
7.3. EFQM, European Quality Awards.
7.4. ISO 9000.
7.5. Customer service.
7.6. Six sigma.

8. Information Systems and Information Technologies.

8.1. Information System.
8.2. EDI.
8.3. Logistics Software.

10. Recommended Reading

a. Manuals


- Course Web Page eriete

b. Further Readings