

TEACHING PLAN FOR

• MANAGEMENT OF INTERNATIONAL OPERATIONS

1. Basic Description

Name of the course: Management of International Operations

Academic year: 2018–2019

Year: 2nd

Term: 2nd

Degree / Course: Bachelor's Degree in International Business and Marketing

Code: 42303

Number of credits: 4

Total number of hours committed: 100

Teaching language: English

Lecturer: María del Mar Viñas

Timetable:

<u>Group 1</u>	<u>Group 2</u>
Lectures Monday, 6.15–7.15 pm Wednesday, 4.15–5.15 pm	Lectures Monday, 4.15–5.15 pm Wednesday, 6.15–7.15 pm
Seminars 103: Friday, 2.30–3.25 pm 101: Friday, 3.30–4.25 pm 102: Friday, 4.30–5.25 pm	Seminars 203: Friday, 6.00–6.55 pm 201: Friday, 7.00–7.55 pm 202: Friday, 8.00–8.55 pm

Office hours and contact information:

5.15–6.10 pm

2. Course Overview

Operations Management (OM) is one of the key functional areas in any organisation or company that deals with the production of goods and services. It is concerned with managing the processes that transform inputs (materials, labour, energy and customers) into outputs (goods and services). Everything we wear, eat, use, read or play with has been produced through a process overseen by an operations manager. This course is concerned with the tasks, issues and decisions handled by operations managers who have made the services and products on which we all depend.

The OM field faces many challenges as a result of globalisation, new product proliferation, technological advances and integration with other functional areas of the company (marketing, finances, etc.). For this reason, we analyse OM in an international context where efficiency is the main goal.

This course covers the main concepts, tools and quantitative models that companies use to manage their operations. Students will take a very practical standpoint by studying

business cases and solving exercises.

3. Competences to be Worked on in the Course

General competences	Specific competences
<p>Instrumental competences</p> <p>G.I.1. Ability to search, analyse, assess and summarise information.</p> <p>G.I.3. Ability to organise and plan.</p> <p>G.I.5. Ability to take decisions in complex and changing environments.</p> <p>General personal competences</p> <p>G.P.6. Ability to foresee events.</p> <p>Generic systemic competences</p> <p>G.S.2. Ability to observe.</p> <p>G.S.3. Ability to think globally.</p> <p>G.S.5. Ability to learn on one's own.</p> <p>Competences for applicability</p> <p>G.A.1. Ability to apply acquired knowledge and skills.</p> <p>G.A.2. Ability to use quantitative criteria and qualitative insights when taking decisions.</p> <p>G.A.5. Ability to understand an economic organisation with a global perspective.</p>	<p>Professional competences</p> <p>E.P.5. Ability to take strategic managerial decisions while taking into account the economic, cultural, social and political determinants specific to a particular area.</p> <p>E.P.7. Illustrate businesses' activities in a practical way by visiting companies, having professionals invited to class sessions or by developing and analysing case studies.</p> <p>E.P.8. Ability to take functional decisions within an organisation with international activity.</p> <p>E.P.12. Ability to critically evaluate local information contexts, knowledge or principles of a more global nature.</p> <p>E.P.23. Ability to apply and expand upon abstract reasoning.</p> <p>E.P.24. Develop the ability to synthesise.</p>

The above competences reflect the basic competences set out in Royal Decree 1393/2007, namely:

- Competence to **comprehend knowledge, on the basis of general secondary education.**
- Competence to **apply knowledge** to day-to-day work in international management or marketing, in particular the ability to develop and defend arguments and to solve problems.
- Competence to **gather and interpret** relevant **data**, enabling the development of critical judgements on the economic and social reality.
- Competence to **communicate and transmit information** (ideas, problems, solutions) to a specialist and non-specialist audience.
- Competence to **develop learning activities** in a relatively autonomous manner.

The competences worked on in the course are divided into two groups: those seen as a development or specification of a basic competence; and those that hone graduates' professional profile with respect to general and specific competences.

Basic competence: understanding of knowledge

General competences G.I.3, G.S.2, G.A.2

Basic competence: application of knowledge

General competences G.S.3

Specific competences E.P.12, E.P.23

Basic competence: gather and interpret data

General competences G.I.1, G.P.6

Specific competences E.P.24

Basic competence: develop learning activities

General competences G.I.3, G.S.5

Specific competences E.P.12

Competences that hone graduates' professional profile which are not included under basic competences

In general, these competences combine the following key elements for honing students' professional profile in the area of international business and marketing:

- Provide students with the capacity to adapt to dynamic teams and environments.
- Provide students with the capacity to create their own integral vision of the operation of a business or international marketing project.
- Provide students with the capacity to take complex decisions and carry out negotiation processes.

General competences G.I.5, G.A.1, G.A.5

Specific competences E.P.5, E.P.7, E.P.8

Learning outcomes

Students will be able to analyse the impact of logistics activities in establishing an international business strategy and understand the role of operations, objectives and basic concepts in a process of internationalisation.

4. Contents

Chapter 1: Introduction to Operations and Supply Chain Management

What is OM and SCM?(1) History of OM (1). Goods v Services (1). OM Decisions. Productivity (2)

Chapter 2: Linear Programming applied to OM problems

Introduction to Linear Programming (LP). Graphical LP. LP using Excel Solver. LP Applications. Integer LP (Appendix A)

Chapter 3: Operations Strategy

Operations and Supply Chain Strategy (2). Product and Service Design (3). Process Strategy. Manufacturing Process Flow Design (6)

Chapter 4: Process Analysis

Process Analysis. Flowcharts. Types of Processes. MTS v MTO. Process Performance (5).

Bottlenecks. Theory of Constraints. Capacity Analysis: Multiple Products & Batches. Control Methods (20)

Chapter 5: Aggregate Planning

Forecasting (15). Sales and Operations Planning. Aggregate Planning Techniques. Yield Management (16)

Chapter 6: Queuing Management

Types of Queues. Stochastic Queues. Queuing Laws. Queuing Systems. Psychology of Waiting Lines (7A). Simulation (19A).

Chapter 7: Inventory Management

Purposes of Inventory. Inventory Costs. ABC. Inventory Systems. Economic Order Quantity (EOQ). Quantity Discounts. Probabilistic Models. Safety Stock. Single-Period Inventory Model (17)

Chapter 8: Lean Manufacturing and Quality

Toyota Production System. Lean Implementation (13). Total Quality Management. Cost of Quality. Six-Sigma Quality. Quality Tools (9)

5. Assessment

Evaluation

This course is graded from 0 to 100 points. Regular evaluation will be carried out on the following basis:

Form of assessment	Time period	Type of assessment		Assessment agent			Type of activity	Grouping		Weighting
		Mandatory	Optional	Lecturer	Self-assessment	Co-assessment		Ind.	Group (#)	
Class participation	Throughout the course	X		X			Application, Conceptual and Synthesis	X		6%
Concept review quizzes	Periodically, after each chapter	X			X		Conceptual	X		8%
Exercises or pop quizzes	Periodically	X		X			Application	X	X	12%
Case analyses	Periodically	X		X			Application and Synthesis		X	8%
Midterm exam	Midterm	X		X			Synthesis		X	16%
Final exam	Exam week	X		X			Synthesis	X		50%

Class participation (7%) includes participation in both lectures and seminars.

There will be **seven concept review quizzes (7%)** at the end of each chapter to be done via Moodle.

Seminars (20%)

Seminars will be graded follows:

Exercise sets or pop quizzes (12%). During Seminars 1, 2, 3, 6, 7 and 8 students will work in pairs to solve an exercise uploaded one week in advance. At the seminar in question you may be asked to turn in the corresponding exercise set or to take a pop quiz in class, which involves solving a similar exercise individually. At least three of these activities will be graded (4% each). It may be the case that only a random subset of the exercise set will be graded.

Case analyses (8%). During Seminars 4, 5 and 9 students will evaluate three business cases by discussing and solving them in teams. Team reports should be submitted in accordance with the following timetable:

- Case 1: due at the beginning of Seminar 4.
- Case 2: due at the beginning of Seminar 5.
- Case 3: due at the start of the last lecture.

At the seminar in question, one or more teams will randomly present the case in front of the class.

The presenters will get extra points for their grade for that seminar (between ½ point and 1 point). Two of these activities will be graded (4% each).

Midterm exam (16%)

Students who do not achieve an average grade for their continuous assessment activities (participation, quizzes, seminars, and midterm exam) of at least 40 out of 100 will not be allowed to sit their final exam.

Final exam (50%)

Students must achieve a minimum grade of 40 out of 100 in their final exam before their final course grade can be calculated. The final course grade includes the average score for the continuous assessment activities (participation, quizzes, seminars and midterm exam). Students must achieve a minimum grade of 50 out of 100 for their final course grade in order to pass the subject.

Students who score less than 40 out of 100 points in their final exam will be awarded a final course grade equal to their final exam score; their average score for the continuous assessment activities will not be taken into account.

Retakes

Students who fail the course after taking their final exam may retake their final exam during the period stipulated by the school. Their score for their retaken exam replaces their previous final exam score. It continues to account for 50% of the course grade and the same minimum score requirements apply.

Further notes on grading and assignments

- Students must achieve a minimum grade of 40 points out of 100 for their final exam AND have an average grade of at least 50 points out of 100 in total. The same applies to retakes. Students who score less than 40 points out of 100 in their exam will be awarded a final course grade equal to their final exam score.
- Students who do not take the final exam will receive a "No Show" grade.
- Students who fail to submit an assignment (or submit it late) will receive a score of 0 for that item.
- If two (or more) students (or groups) turn in the same or very similar assignments, they will be given a score of 0.
- Students who are doing a company internship will be graded in the same way as other students. However, the percentages corresponding to "Class participation" and "Review quizzes" will be added to "Midterm exam". As a result, the midterm exam will account for 30% of the global grade for these students.

Working competences and assessment of learning outcomes:

	GI1	GI3	GI5	GP6	GS2	GS3	GS5	GA1	GA2	GA5
Concept review quizzes	X						X			X
Exercise sets (in pairs)	X	X			X	X	X	X	X	X
Case analyses (teams)	X	X	X	X	X	X	X	X	X	X
Midterm and final exam	X	X	X	X	X	X	X	X	X	X

	EP5	EP7	EP8	EP12	EP23	EP24	Learning outcomes
Concept review quizzes							X
Exercise sets (in pairs)				X			X
Case analyses (teams)	X	X	X	X	X	X	X

Final exam			X	X		X	X
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Any students found copying and/or plagiarising work, in whole or in part, will fail the subject. They will receive a final grade of zero and will not be allowed to take the make-up exam. In accordance with the UPF Disciplinary Rules and Regulations for Students, other additional sanctions may apply depending on the seriousness of the offence.

6. Bibliography and Teaching Resources

Basic bibliography

- Jacobs, F.R. and R.B. Chase. *Operations and Supply Chain Management*. 13th edition. New York: McGraw-Hill, 2011.

Hereinafter referred to as JCA

Correspondence between Course Chapters and Book Chapters:

Course Chapter 1: Book Chapters 1 and 2

Course Chapter 2: Book Appendix A

Course Chapter 3: Book Chapters 2, 3 and 6

Course Chapter 4: Book Chapters 5 and 20

Course Chapter 5: Book Chapters 15 and 16

Course Chapter 6: Book Chapters 7A and 19A

Course Chapter 7: Book Chapter 17

Course Chapter 8: Book Chapters 9 and 13

Supplementary bibliography

- Goldratt, E.M, and J. Cox. *The Goal: A Process of Ongoing Improvement*. Great Barrington, MA: North River Press, 1992.
- Render, B., R.M. Stair, and M.E. Hanna. *Quantitative Analysis for Management*. 10th edition. Upper Saddle River, NJ: Prentice Hall, 2009.
- Nahmias, S. *Production and Operations Analysis*. 6th edition. New York: McGraw-Hill, 2008.
- Heizer, J., and B. Render. *Operations Management*. 9th edition. Upper Saddle River, NJ: Prentice Hall, 2007.
- Chopra, S., and P. Meindl. *Supply Chain Management*. 4th edition. Upper Saddle River, NJ: Prentice Hall, 2009.

Teaching resources (posted on AULA-ESCI)

- PowerPoint slides for each session.
- Exercise sets.
- Business cases.
- Glossary of terms.
- Concept review quizzes.

7. Methodology

Lectures (face-to-face in the classroom). Twenty lectures in which concepts, theoretical background and basic examples will be taught. Active participation in class is strongly encouraged. Use of laptops in class is restricted to taking notes. Those using a laptop in class may be asked to email the notes taken.

Seminars (face-to-face in the classroom). Nine seminars in which business cases and practical exercises will be discussed among students, guided by the instructor. Active participation in class is practically mandatory. A midterm exam will be set in an additional seminar.

Exercise sets (*directed outside the classroom*). Six exercises (or sets of exercises) to be solved in pairs before seminars in order to help students understand the practical concepts taught in class. You may be asked to turn in this set (or a random subset) at the beginning of the seminar.

Pop quizzes (*independent work*). In some seminars there may be a pop quiz to test your ability to solve a similar problem.

Business cases (*directed outside the classroom*). Three business cases to be discussed and solved in teams in order to apply the course concepts to a realistic business problem. The cases will be handed in at the beginning of the class or seminar.

Concept review quizzes (*independent work outside the classroom*). Eight multiple-choice tests to be answered individually online (via Moodle) in order to assess students' understanding of the course main concepts.

Midterm and final exam (*independent work*).

8. Timetable of Activities

- 1) Allocation of hours between theoretical and practical lessons (based on the number of credits in the curriculum):
 - 2 hours of lectures and 1 hour of seminars (beginning in the second week of classes)
- 2) Scheduled curriculum activities.