

# Teaching guide

## IDENTIFICATION DETAILS

Degree:	Business Analytics		
Field of Knowledge:	Social and Legal Science		
Faculty/School:	Law, Business and Governance		
Course:	OPERATIONS MANAGEMENT		
Type:	Optional	ECTS credits:	3
Year:	3	Code:	5374
Teaching period:	Fifth semester		
Area:	Management Analytics		
Module:	Disciplinary Training		
Teaching type:	Classroom-based		
Language:	English		
Total number of student study hours:	75		

Teaching staff	E-mail
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## SUBJECT DESCRIPTION

This subject is divided into two parts

First part will cover the main and general conception of operations within an enterprise, understood as the efficient management of resources to produce whatever goods or services the organization offers to its customers. It will cover what is OM; OM in product production companies vs service companies; process management (definition, measurement, improvement); customer processes (customer journey, customer experience).

Second part will specifically focus on LEAN methodology as a mean for optimization, no matter what type of operation, through the concepts of value and continuous improvement that has led its creator, Toyota, to the first spot worldwide in the car industry

## GOAL

Understand the importance of proper operations management, considering those operations are the ones bringing to life the company strategies and the products and services of our commercial proposition to the customer.

Understand that operations are not static; people manage operations and as such, we need proper tools and skills to ensure those operations are continuously monitored and optimized over time (continuous improvement)

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## PRIOR KNOWLEDGE

Basic maths and statistics knowledge

## COURSE SYLLABUS

Lecture 1: Introduction to Operations Management - General concept of Operations Management Function and its role in the organization - Strategic vs. tactical operations - Processes introduction - Challenges faced in Operations Management - Do's and Don'ts in Operations Management

Lecture 2: Processes - Definition of process - Process mapping: Process flow charts, process measuring - Improving processes: Business process reengineering

Lecture 3: Customer processes: The customer Journey - Customer Journey: Understand the interactions of our customers with our company and how our operations impact in the customer experience - Customer journeys in a new era: Omnichannel customer experience

Lecture 4: Introduction to LEAN management - History of LEAN - LEAN Basics: The three process inhibitors - Introduction to the LEAN tools to eliminate the system inhibitors - The 3 dimensions of a LEAN operations improvement: Operating system, Management infrastructure, Culture

Lecture 5: LEAN management; Root cause analysis & problem solving - Definition of a problem - Root cause analysis - Problem solving methodology

Lecture 6: Customer experience problem solving & improvement - How to measure the customer experience - How to analyse the customer experience and the impact of our operations in that experience - How to improve the customer improvement with our operations performance

Lecture 7: LEAN operations; variability - Understanding why variability is damaging your operations - Definition of variability and how to measure it - How to identify abnormal (special cause) variation

Lecture 8: LEAN operations; Standardization - What is a standard - What makes a standard a good standard? - How to formalise an standard

Lecture 9: LEAN operations; performance management - How to measure a process: How to define a good KPI -

Performance dialogue: How to review a process KPI and define actions upon  
Lecture 10: LEAN operations; program design - Program design principles - How to approach a transformation

## EDUCATION ACTIVITIES

In class methodology will be a combination of theory and practice, with “learning by doing” activities that will enforce the key concepts to learn  
Additionally, out of class activities will be required, that will be periodically reviewed in class to allow group analysis and problem solving of the subjects

## DISTRIBUTION OF WORK TIME

CLASSROOM-BASED ACTIVITY	INDEPENDENT STUDY/OUT-OF-CLASSROOM ACTIVITY
30 hours	45 hours

## SKILLS

### Basic Skills

Students must have demonstrated knowledge and understanding in an area of study that is founded on general secondary education. Moreover, the area of study is typically at a level that includes certain aspects implying knowledge at the forefront of its field of study, albeit supported by advanced textbooks

Students must be able to apply their knowledge to their work or vocation in a professional manner and possess skills that can typically be demonstrated by coming up with and sustaining arguments and solving problems within their field of study

Students must have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgments that include reflections on pertinent social, scientific or ethical issues

Students must be able to convey information, ideas, problems and solutions to both an expert and non-expert audience

Students must have developed the learning skills needed to undertake further study with a high degree of independence

### General Skills

Capacity for leadership and teamwork in the information society.

Capacity for communicating in a native or foreign language in the information society.

Capacity for critical, self-critical, analytical and reflexive thought.

Capacity for autonomous learning in the information society.

### Specific skills

Know and understand the basic principles of business analytics and its essential concepts and tools, geared towards identifying and assessing opportunities in all the functional areas of the business: general and strategic management, human resources, finance, marketing, production and operations.

Know how to identify and resolve real business problems through advanced data analysis and the selection of the correct techniques for decision-making.

Know and understand the basics of strategic planning and project managing and apply them in reality.

## LEARNING RESULTS

The student will understand that "Operations" is a wide concept, present in any company in whatever sector

The student will be able to analyse if the operations under his/her responsibility are optimized or have room for improvement

The student will be able to promote a continuous improvement culture to his/her area of responsibility

The student will be able to constantly search for the root cause of problems, far beyond any "operations" job

The student will be able to define his/her job as a set of processes

The student will easily review if his/her tasks are well standardized and will be able to promote good standards to improve the quality of his/her area's outcomes

## LEARNING APPRAISAL SYSTEM

### A) EVALUATION FOR FIRST REGISTRATION STUDENTS -

- Final Written exam: 55% of the evaluation
- Practice: 35% of the evaluation. An operations improvement project done in groups
- In class participation: 10%.

Minimum of 4 in final written exam score to pass the subject (if weighted score, together with practice and in class participation, above 5)

For the extraordinary call, practice will count for 45% of the evaluation, written exam for 55% of the evaluation.

Those students who have presented the practice in ordinary call will keep that same evaluation. Students without practice project presented will have to contact the teacher for being assigned with a practice project to be presented before the extraordinary call date

B) ALTERNATIVE EVALUATION SYSTEM: FOR STUDENTS IN SECOND OR SUCCESSIVE REGISTRATIONS, STUDENTS WITH ACADEMIC WAIVER AND EXCHANGE STUDENTS - Final Written exam: 65% of the evaluation - Practice: 35% of the evaluation. An operations improvement project or specific practice jobs. Students

must contact the teacher to get practice assignments that will be presented before the final exam date The detailed evaluation parameters will be applicable in both ordinary and extraordinary calls

ALL TESTS SUSCEPTIBLE TO EVALUATION WILL BE SUBJECT TO THE PROVISIONS OF THE EVALUATION REGULATIONS OF THE FRANCISCO DE VITORIA UNIVERSITY. The behaviors of plagiarism, as well as the use of illegitimate means in the evaluation tests, will be sanctioned in accordance with those established in the Regulation of Evaluation and the Regulations of Coexistence of the university

*Las conductas de plagio, así como el uso de medios ilegítimos en las pruebas de evaluación, serán sancionados conforme a los establecido en la Normativa de Evaluación y la Normativa de Convivencia de la universidad*

## **BIBLIOGRAPHY AND OTHER RESOURCES**

### **Basic**

James P. Womack, Daniel T. Jones, Daniel Roos. The machine that changed the world: [the story of lean production Toyota's secret weapon in the global car wars that is revolutionizing world industry / London [etc.] :Simon & Schuster,2007.