

BUS 366E Operations Management

Course Description

Operations management is the systematic direction and control of the processes that transform inputs into finished goods and services. This course provides an overview of operating decisions and practices in both manufacturing and service-oriented firms. Students will gain the knowledge of qualitative and quantitative decision support tools and techniques for management decision-making in operations.

Course Goals and Methodology

In this course, students will:

- Learn the key terms and concepts underpinning Operations Management both in the service and the industrial sectors.
- Analyze the importance of the operations subsystem within the context of business systems; understand the key strategic decisions which operations managers make in order to reach production and overall business goals.
- Identify the main tools and techniques used in production management to optimize strategic production decisions: the product, process strategy, long-term capacity, localization and distribution.
- Learn how to calculate and improve productivity within a company in both the industrial and service sectors.
- Analyze criteria and factors taken into account by operations managers when making both strategic decisions in order to reach production and overall business goals.
- Effectively apply key production management tools and techniques to optimize strategic production decisions: the product, process strategy, long-term capacity, localization and distribution.
- Be able to communicate effectively both when presenting/expressing ideas and when understanding the ideas expressed by others.
- Be able to distinguish between specific production functions and more general company functions.
- Be equipped to identify and deal with problematic production scenarios, making good use of available information.
- Be prepared to be a leader and direct a company's production or operations department.

Learning Objectives

Through this course, students will:

- Become familiar with key strategic decisions, including: product selection and design, technology and process design, capacity, localization, distribution and work design.
- Develop the ability to carry out diagnostics.
- Develop the ability to differentiate between relevant and superficial information when dealing with a strategic problem relating to production management.

Course contents

Part I. INTRODUCTION TO OPERATIONS STRATEGY

1. INTRODUCTION TO OPERATIONS MANAGEMENT.

- 1.1 What is OM?
- 1.2 Why study OM?
- 1.3 What Operations Managers Do
- 1.4 The Heritage of Operations Management
- 1.5 Operations in the Service Sector
- 1.6 The Productivity Challenge

2. OPERATIONS STRATEGY AND COMPETITIVENESS

- 2.1 Global Strategies
- 2.2 A Global View of Operations
- 2.3 Developing Missions and Strategies
- 2.4 Achieving Competitive Advantage Through Operations
- 2.5 Ten Strategic OM Decisions
- 2.6 Dynamics of Operations Strategy
- 2.7 Strategy Development and Implementation
- 2.8 Global Operations Strategy Options

Part II. STRATEGIC DESIGN

3. PRODUCT DESIGN.

- 3.1 Product Decision
- 3.2 Generating New Products
- 3.3 Product Development
- 3.4 Techniques for Product Design
- 3.5 Service Design

4. PROCESS SELECTION AND DESIGN.

- 4.1 Process Strategy
- 4.2 Process Focus

- 4.3 Repetitive Focus
- 4.4 Product Focus
- 4.5 Mass Customization
- 4.6 Comparison of Processes
- 4.7 Process Analysis and Design
- 4.8 Service Process Design

5. JOB DESIGN AND WORK MEASUREMENT.

- 5.1 Job Design
- 5.2 Methods Analysis
- 5.3 Labor Standards and Work Measurement

6. CAPACITY PLANNING.

- 6.1 Capacity Measurement
- 6.2 Long-Term Capacity Strategies
- 6.3 Short-Term Capacity Strategies
- 6.4 Break-Even Analysis: Comparison of Alternatives

7. FACILITY LOCATION.

- 7.1 The Strategic Importance of Location
- 7.2 Factors that Affect Location Decisions
- 7.3 Methods of Evaluating Location Alternatives
- 7.4 Service Location Strategy

8. FACILITY LAYOUT

- 8.1 The Strategic Importance of Layout Decisions
- 8.2 Basic Production Layout Formats
 - 8.2.1 Fixed-Position Layout
 - 8.2.2 Process-Oriented Layout
 - 8.2.3 Repetitive and Product-Oriented Layout
 - 8.2.4 Group Technology (Cellular) Layout
- 8.3 Office Layout
- 8.4 Retail Layout
- 8.5 Warehousing and Storage

Course materials

Reid, D., & Sanders, N.R. (2009). Operations Management (4th Ed.). Wiley.
ISBN-13: 978-0470325049.

<https://campusvirtual.upo.es/>
On-line platform with the course material.

Course Requirements and Grading

Your final grade will be calculated according to the following system:

- Cases (20%)
- Mid-term exam (20%)
- Final exam (20%)
- Final project (20%)
- Class participation (20%)

The following link contains an example of class participation assessment:

<https://www.cmu.edu/teaching/assessment/examples/courselevel-bycollege/cfa/tools/participationrubric-cfa.pdf>

General Course Policies

Each student is expected to be familiar with the course syllabus. Students are expected to focus their full attention on the class, arrive on time, and stay until class ends. Leaving the classroom on repeated occasions is disturbing to both your professor and your classmates and may adversely affect your participation grade. Please make use of the 10-minute breaks in between classes to fill up your water bottle, use the restroom, etc.

Students are expected to listen and respect other points of view. Phone calls, social media, email, or Internet browsing at any time during class are not acceptable during class except for specific class-related activity expressly approved by your instructor. You are responsible for any and all course material covered in class, announcements, and/or handouts if you are not present for any reason. Students will be held responsible to be up to date by attending to class regularly and checking both email and the Blackboard site of the course frequently (monitor your email and Blackboard announcements at least once every 24 hours).

Communicating with instructor: Please allow at least 48 hours for your instructor to respond to your emails. The weekend is not included in this timeframe. If you have an urgent request or question for your professor, be sure to send it during the week.

Attendance and Punctuality

Attendance is mandatory at all classes. As we understand that you might fall ill or be unable to come to class (e.g. due to a religious holiday, a flight delay, a family wedding/reunion, a graduation, a job interview, etc.) at some point during the semester, you are allowed up to 4 absences. You will be responsible for the material covered and any work missed. You will not need to justify your absences (up to 4) in any way unless you miss an exam, a presentation, a quiz, etc. In this case, you must present a doctor's note (signed, stamped and dated) to be able to reschedule the exam, etc. It will still count as an absence but you will be allowed to retake the exam, etc. We don't encourage you to use all 4 days unless you really need them as your participation

grade may suffer if you are not in class. If used unwisely and you get sick late in the semester, the following penalties will apply:

- On your 5th absence, 1 point will be taken off of your final Spanish grade
- On your 6th absence, 3 points will be taken off of your final Spanish grade
- On your 7th absence, you fail the course.

Exams missed due to an excused absence (accompanied by a doctor's note, dated, signed and stamped) must be made up within a week of returning to classes. Talk to your professor immediately after your return.

COVID-19

Regarding any changes related to the COVID-19 pandemic, the procedure to follow will be in accordance with the current legislation in the region of Andalucía, Spain.

Academic Honesty

Academic integrity is a guiding principle for all academic activity at Pablo de Olavide University. Cheating on exams and plagiarism (which includes copying from the Internet) are clear violations of academic honesty. A student is guilty of plagiarism when he or she presents another person's intellectual property as his or her own. The penalty for plagiarism and cheating is a failing grade for the assignment/exam and a failing grade for the course. The International Center may also report this to your home university. Avoid plagiarism by citing sources properly, using footnotes and a bibliography, and not cutting and pasting information from various websites when writing assignments.

Learning Accommodations

If you require special accommodations, or have any other medical condition you deem may affect your class performance, you must stop by the International Center to speak to the Faculty Coordinator to either turn in your documentation or to confirm that our office has received it. Her name is Marta Carrillo (mcaroro@acu.upo.es). She will explain the options available to you.

Behavior Policy

Students are expected to show integrity and act in a professional and respectful manner at all times. A student's attitude in class may influence his/her participation grade. The professor has a right to ask a student to leave the classroom if the student is unruly or appears intoxicated. If a student is asked to leave the classroom, that day will count as an absence regardless of how long the student has been in class.