

## **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%)
- Final project (20%)
- Class participation (20%) .....60%
- Mid-term exam (20%)
- Final exam (20%) .....40%

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.

## **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](mailto: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.

## **Learning Objectives**

General Skills:

- Capacity for analysis & synthesis;
- Problem-solving skills;
- Decision-making skills;

- Capacity for critical thinking;
- Collaborative learning/Teamwork skills;
- Leadership skills;
- Interpersonal skills;
- Ability to put theory into practice;
- Capacity for learning and refreshing knowledge;
- Autonomous learning skills/Self-sufficiency.

#### Instrumental Skills:

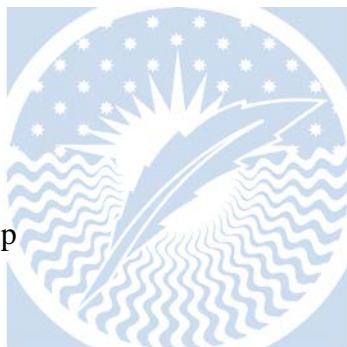
- Analysis and synthesis skills
- Organization and planning skills
- Oral and written communication in a foreign language
- Skills to obtain and analyze information from different sources
- Decision making and problem-solving skills

#### Personal Skills:

- Team work and interpersonal relations skills
- Personal relations skills
- Ethical compromise within the work place

#### Systemic skills:

- Autonomous learning skills
- Creativity
- Leadership
- Initiative and entrepreneurship



### Student engagement policy

Student's engagement will account for at least 20% of the final grade for every course, thus highlighting its significance for high-impact learning.

Students will receive two engagement grades: a mid-term grade (at least 10%) and an end-of-semester grade (at least 10%).

An engagement rubric is provided to ensure transparent and consistent grading.

#### Absences and lack of engagement

Absences during the add/drop period do not count against students' engagement grade, but may impact their performance in the course.

As a consistent lack of academic engagement may raise concerns about a student's overall academic performance, the following steps will be taken in order to support students' success:

#### **Initial outreach – after missing 3 classes\***

E-mail from professor reiterating engagement policy and consequences for additional absences.

\* 1 class for courses that meet once a week and 6 classes for courses that meet daily.

#### **Second outreach – after missing 4 classes\***

E-mail from professor and notification of academic staff at the International office.

\* 2 classes for courses that meet once a week and 8 classes for courses that meet daily.

**Academic probation – after missing 6 classes\***

Student is called in for a meeting with academic staff at the International office. Automatic notification of home institution and further academic consequences.

\* 3 classes for courses that meet once a week and 12 classes for courses that meet daily.

Any additional absences will result in a failing grade.





**Rubric:**

Criteria	Exemplary (9-10)	Proficient (7-8)	Passing (5-6)	Poor (0-4)
<b>Attendance</b>	Arrives on time and stays for the entire duration of class. No absences, or if absent once, demonstrates knowledge of course material missed.	Misses no more than two sessions or is occasionally late. Demonstrates knowledge of course material missed.	Misses 3 or 4 sessions or frequently arrives late/leaves early; exhibits little knowledge/interest regarding course material missed.	Misses 5 or more sessions and does not demonstrate knowledge of course material missed.
<b>Preparation</b>	Consistently well-prepared; demonstrates deep understanding of readings and completes assignments.	Usually prepared; completes readings with some understanding and usually completes assignments.	Occasionally prepared. Demonstrates limited understanding of materials and occasionally completes assignments.	Rarely prepared; minimal effort to engage with course materials.
<b>Participation</b>	Actively participates in discussions with thoughtful comments/questions; demonstrates knowledge of the material and critical thinking skills.	Participates often demonstrating knowledge of material and critical thinking skills.	Participates once in a while or contributions lack depth or relevance.	Does not participate or is disruptive during discussions.
<b>Attentiveness &amp; Respect</b>	Fully engaged and attentive during all sessions; respectful to professor and fellow students. Use of laptop/tablet for notetaking only; no cellphone use.	Generally attentive, with very infrequent lapses in focus and use of electronic devices for non-class related purposes. Respectful to professor and fellow students.	Occasionally inattentive or disengaged. Use of electronic devices for non-class related purposes thus showing disrespect towards professor and fellow students.	Rarely attentive, focused or responsive. Repeated use of electronic devices for non-class related purposes thus showing disrespect towards professor and fellow students.
<b>Collaboration &amp; Feedback</b>	Effectively collaborates with peers in group or in-class activities following professor's instructions. Incorporates feedback to improve learning & performance.	Collaborates frequently with peers or in in-class activities. Incorporates feedback and makes moderate efforts to improve learning & performance.	Occasionally works well with peers but does not contribute substantially to in-class or group assignments. Responds to feedback inconsistently with minimal improvement.	Does not collaborate with peers, does not complete in-class or group assignments. Ignores feedback.

## 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.

## AI use

About using Artificial Intelligence (AI) The use of AI tools such as grammar checkers, ChatGPT, etc. and automatic translation tools is prohibited unless expressly permitted by the instructor to enhance the students' learning experience. Plagiarism includes, but is not limited to, the unacknowledged use of these tools to create content submitted as one's own. If the use of any of these tools is suspected, the instructor may request notes and other materials used in preparing assignments. Students must retain these materials until final grades are posted. Failure to produce these materials when requested may negatively impact the student's grades.

## Class Schedule

WEEK	GENERAL THEORY NO. OF HOURS	THEORY-INTO-PRACTICE NO. OF HOURS	TOPICS
1st Week	1 hour 20 minutes	1 hour 20 minutes	UNIT 1
2nd Week	1 hour 20 minutes	1 hour 20 minutes	UNIT 1
3rd Week	1 hour 20 minutes	1 hour 20 minutes	UNIT 2
4th Week	1 hour 20 minutes	1 hour 20 minutes	UNIT 2
5th Week	1 hour 20 minutes	1 hour 20 minutes	UNIT 3
6th Week	1 hour 20 minutes	1 hour 20 minutes	UNIT 4
7th Week	1 hour 20 minutes	1 hour 20 minutes	UNIT 4
8th Week	1 hour 20 minutes	1 hour 20 minutes	UNIT 5
9th Week	1 hour 20 minutes	1 hour 20 minutes	UNIT 5
10th Week	1 hour 20 minutes	1 hour 20 minutes	UNIT 6
11th Week	1 hour 20 minutes	1 hour 20 minutes	UNIT 7
12th Week	1 hour 20 minutes	1 hour 20 minutes	UNIT 8
13th Week	1 hour 20 minutes	1 hour 20 minutes	PRESENTATIONS
14th Week	1 hour 20 minutes	1 hour 20 minutes	PRESENTATIONS