



UNIVERSIDAD
DE MURCIA

1. Identification

1.1. About the course

Academic Term	2024/2025
Degree	GRADO EN ADMINISTRACIÓN Y DIRECCIÓN DE EMPRESAS, PROGRAMA ACADÉMICO DE SIMULTANEIDAD DE DOBLE TITULACIÓN CON ITINERARIO ESPECÍFICO DE GRADO EN ADMINISTRACIÓN Y DIRECCIÓN DE EMPRESAS Y GRADO EN DERECHO
Course	DIRECCIÓN DE OPERACIONES
Code	2361
Year	SEGUNDO TERCERO
Course type	OBLIGATORIA
Number of groups	6
ECTS	6.0
Estimation of workload	150.0 150.0
Timeline	2º Cuatrimestre 1º Cuatrimestre
Languages	Spanish, English

1.2. Teaching staff

MONLLOR DOMINGUEZ, JORGE

Professor: **GRUPO 1, GRUPO 3**

Group coordination: **GRUPO 1, GRUPO 3**

Course coordinator

Category

PROFESORES TITULARES DE ESCUELAS UNIVERSITARIAS

Area

ORGANIZACIÓN DE EMPRESAS

Department

ORGANIZACIÓN DE EMPRESAS Y FINANZAS

Email / Personal web page / Online tutoring sessionsjmonllor@um.es Online tutoring sessions: **Sí****Phone number and office hours**

Duration:	Day:	Hours:	Place:
A	Jueves	10:00-13:00	868883861, Facultad de Economía y Empresa B1.1.065 (D1/07 PROF. JORGE MONLLOR DOMINGUEZ)

Remarks:

There are no records

PELAEZ IBARRONDO, JUAN JOSEProfessor: **GRUPO 4, GRUPO 5, GRUPO ITINERARIO**Group coordination: **GRUPO 4, GRUPO 5, GRUPO ITINERARIO****Category**

PROFESORES TITULARES DE ESCUELAS UNIVERSITARIAS

Area

ORGANIZACIÓN DE EMPRESAS

Department

ORGANIZACIÓN DE EMPRESAS Y FINANZAS

Email / Personal web page / Online tutoring sessionsjpelaez@um.es Online tutoring sessions: **No****Phone number and office hours**

Duration:	Day:	Hours:	Place:
A	Lunes	17:00-18:00	868887901, Facultad de Economía y Empresa

Remarks:Concertar previamente con el profesor por mail: jpelaez@um.es**PEMARTIN GONZALEZ-ADALID, MARIA**Professor: **GRUPO BILINGÜE**Group coordination: **GRUPO BILINGÜE****Category**

PROFESORES TITULARES DE UNIVERSIDAD

Area

ORGANIZACIÓN DE EMPRESAS

Department

ORGANIZACIÓN DE EMPRESAS Y FINANZAS

Email / Personal web page / Online tutoring sessionspemartin@um.es pemartin@um.es Online tutoring sessions: **Sí**

Phone number and office hours

Duration:	Day:	Hours:	Place:
C2	Jueves	12:00-13:30	868888747, Facultad de Economía y Empresa B1.1.061 (D1/03 PROF. MARIA PEMARTIN GONZÁLEZ-ADALID)

Remarks:

Es necesario enviar un correo electrónico previo a la profesora. En caso de no poder acudir en este horario, existe la posibilidad de acordar otro día y hora para la tutoría previa comunicación con la profesora.

VALLE MESTRE, LEDIAN

Professor: **GRUPO 5**

Group coordination:

Category

PROFESOR CONTRATADO PARA SUSTITUCIONES

Area

ORGANIZACIÓN DE EMPRESAS

Department

ORGANIZACIÓN DE EMPRESAS Y FINANZAS

Email / Personal web page / Online tutoring sessions

ledian.valle@um.es Online tutoring sessions: **Sí**

Phone number and office hours

Duration:	Day:	Hours:	Place:
C2	Lunes	11:30-13:30	868887965, Facultad de Economía y Empresa B1.0.081 (D0/04 PROFESORES ASOCIADOS)

Remarks:

Tutoría virtual Previa solicitud a través del email: ledian.valle@um.es

Duration:	Day:	Hours:	Place:
C2	Jueves	15:30-17:30	868887965, Facultad de Economía y Empresa B1.0.081 (D0/04 PROFESORES ASOCIADOS)

Remarks:

Grupo 4/ Despacho D0/04, Facultad de Economía y Empresa Tutoría virtual Previa solicitud a través del email: ledian.valle@um.es

2. Presentation

Operations Management includes all the activities in charge of transforming raw material inputs into finished products or services, considering all the supply chain activities, from purchasing, project planning or production, to logistics, transportation and warehousing, providing a higher added value for the customer.

This function requires the adoption of a series of decisions of both strategic and tactical-operational nature, on a large number of activities, employees and resources of the company, which will have a direct effect on productivity, costs and results of the company. This requires that these decisions be made as responsibly and efficiently as possible. Operations Management uses a set of procedures, methods and techniques, some of which are the subject of study in this course.

Consequently, the objective of this course is to study the major decisions made in the Operations area of the company, observe their relationships with other areas of the company, and analyse those tools that are essential for the efficient and competitive management of the production unit, both at the strategic level (capacity, location, processes and layout distribution), and the tactical level (quality management, inventory management, MRP, project management, Just in time and supply chain management).

3. Conditions of access to the course

3.1. Incompatibilities

There are no records

3.2. Requirements

There are no records

3.3. Recommendations

OM includes a blend of topics from accounting, industrial engineering, management, management science and statistics. Therefore, to take this course knowledge in Business Management, Management Accounting, Mathematics and Statistics are highly recommended.

4. Competencies

4.1. Basic competencies

- CB2: Que los estudiantes sepan aplicar sus conocimientos a su trabajo o vocación de una forma profesional y posean las competencias que suelen demostrarse por medio de la elaboración y defensa de argumentos y la resolución de problemas dentro de su área de estudio
- CB5: Que los estudiantes hayan desarrollado aquellas habilidades de aprendizaje necesarias para emprender estudios posteriores con un alto grado de autonomía

4.2. Degree competencies

- CG3: Ser capaz de gestionar la información y el conocimiento en el ámbito de la economía y la empresa, incluyendo saber utilizar como usuario las herramientas básicas en TIC
- CG5: Ser capaz de proyectar los conocimientos, habilidades y destrezas adquiridos en el ámbito de la economía y la empresa para promover una sociedad basada en los valores de la libertad, la justicia, la igualdad y el pluralismo

- CG6: Ser capaz de trabajar en equipo y relacionarse con otras personas del ámbito de la economía y la empresa u otros distintos
- CG7: Desarrollar habilidades de iniciación a la investigación en el ámbito de la economía y la empresa
- CG8: Tener capacidad de análisis y síntesis
- CG9: Tener capacidad de organización y planificación
- CG10: Tener habilidad para analizar y buscar información proveniente de fuentes diversas
- CG11: Tener capacidad para la resolución de problemas
- CG12: Tener capacidad para tomar decisiones
- CG17: Tener capacidad de aprendizaje autónomo
- CG22: Tener motivación por la calidad
- CE7: Poseer conocimientos de dirección general de la empresa, de dirección de recursos humanos y de dirección de producción
- CE13: Ser capaz de gestionar y administrar la empresa u organización de pequeño tamaño, entendiendo su ubicación competitiva e institucional e identificando sus fortalezas y debilidades.

4.3. Transversal and course competencies

- Capacidad de abstracción y enfrentamiento a problemas mediante nuevas técnicas
- Habilidades de gestión de la información
- Capacidad de aplicar los conocimientos a la práctica
- Creatividad e innovación en decisiones de producción
- Mentalidad enfocada a la optimización de los costes de producción
- Capacidad de priorizar tareas en el ámbito productivo

5. Contents

5.1. Theoretical contents

Theme 1: OPERATIONS MANAGEMENT

- 1.1. Introduction to Operations Management
- 1.2. Strategy and Operations Management Decisions
- 1.3. The Production Costs and Productivity Measurement
- 1.4. Break-even Point and Operative Leverage
- 1.5. Trends in OM

Theme 2: PROCESS MANAGEMENT

- 2.1. Introduction to Process Management
- 2.2. Types and strategy of Productive Processes
- 2.3. Analysis, design and Process Improvement
- 2.4. Process Technology
- 2.5. Job Design and Work Measurement

Theme 3: CAPACITY, LOCATION AND LAYOUT PLANNING

- 3.1. Importance of strategic decisions in OM
- 3.2. Decisions related to capacity
- 3.3. Decisions related to location
- 3.4. Decisions related to layout

Theme 4: QUALITY MANAGEMENT

- 4.1. Introduction to Quality Management
- 4.2. International Quality Management Standards
- 4.3. Total Quality Management (TQM): Principles and Tools
- 4.4. Inspection in Quality Management
- 4.5. Service Quality Management

Theme 5: SUPPLY CHAIN MANAGEMENT

- 5.1. Strategic Importance of Supply Chain Management
- 5.2. Supply Chain Dynamics
- 5.3. Purchase Management
- 5.4. Warehouse Management
- 5.5. Introduction to Logistic Management

Theme 6: INVENTORY MANAGEMENT

- 6.1. Concept and Importance of Inventory
- 6.2. Functions, types and management of inventory
- 6.3. Inventory Models
- 6.4. Deterministic models
- 6.5. Probabilistic models

Theme 7: PRODUCTION PLANNING AND CONTROL

- 7.1. Introduction to Production Planning and Control
- 7.2. Aggregate Planning

7.3. Master Production Schedule

7.4. Material Requirements Planning

7.5. Production Planning

7.6. Short term scheduling

Theme 8: PROJECT MANAGEMENT

8.1. Strategic Importance of Project Management

8.2. Stages of the Project Management Process

8.3. Project Planning, Scheduling and Controlling Techniques

8.4. Network Diagram and Approaches: Roy method

8.5. Probability of project completion

Theme 9: LEAN MANAGEMENT

9.1. Introduction to Lean Management

9.2. Just in Time

9.3. The Toyota Production System

9.4. The Lean Production

9.5. Lean in Services

5.2. Practical contents

■ Practical activity 1: Operations Management

Practical aspects of productivity, break-even point and operative leverage

Related to:

- Theme 1: OPERATIONS MANAGEMENT

■ Practical activity 2: Process Management

Practical aspects about the design of productive processes, Work study, Activity time calculation

Related to:

- Theme 2: PROCESS MANAGEMENT

■ Practical activity 3: Capacity, Location and Layout Strategies

Methods for plant location: Global, Descriptive, gravity center method and Transportation problem

Related to:

- Theme 3: CAPACITY, LOCATION AND LAYOUT PLANNING

■ Practical activity 4: Quality Management

Control Charts, tools of TQM

Related to:

- Theme 4: QUALITY MANAGEMENT

■ Practical activity 5: Supply Chain Management

The decision to buy/produce, Suppliers selection, Supply chain efficiency

Related to:

- Theme 5: SUPPLY CHAIN MANAGEMENT

■ Practical activity 6: Inventory Management

Practical aspects of stock and inventory management in probabilistic and deterministic environments

Related to:

- Theme 6: INVENTORY MANAGEMENT

■ Practical activity 7: Production Planning and Control

Development of a production planning system MRP

Related to:

- Theme 7: PRODUCTION PLANNING AND CONTROL

■ Practical activity 8: Project Management

Use of ROY technique to program projects

Related to:

- Theme 8: PROJECT MANAGEMENT

■ Practical activity 9: LEAN MANAGEMENT

Companies case studies Kanban Calculation

Related to:

- Theme 9: LEAN MANAGEMENT

6. Training activities

Training Activity	Methodology	Hours	In-person
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3.1: Resolución de problemas /Estudios de caso.	Practical classroom activities: practical exercises and problem-solving, case studies, project-oriented learning, presentation and analysis of work, debates, simulations, etc.	25.0	100.0
AF1: Exposición teórica / Clase magistral	Master class through the exposition of the contents with audiovisual support. Along with the theoretical explanations, the teaching staff will answer the questions and solve the doubts raised during the class. Teachers will also use examples to illustrate the subject and guide students in the information search.	35.0	100.0
AF6: Trabajo Autónomo del alumno	Tasks and activities performed by the students out of the class timetable, directed and supervised by the teacher.	90.0	0.0
Total		150.00	

7. Course schedule

<https://www.um.es/web/estudios/grados/ade/2024-25#horarios>

8. Assessment systems

Identifier	Name of the assessment tool	Assessment criteria	Weighting
SE1	Prueba final oral y/o escrita.	The final oral and/or written test will consist of two parts: 1. Multiple-choice and/or short questions (50% of the exam mark) 2. Practical exercises and theoretical development questions (50% of the exam mark) The exam will deal with the theoretical and practical contents of the course as reflected in the syllabus and the basic bibliography, as well as with the concepts and ideas dealt with in the theoretical and practical classes. The specific composition of the exam will appear in due course in the call for the exam. In this regard: - No minimum will be required in both parts of the exam, although the student must pass 50% of the exam grade to assess other parts of the evaluation. In case of not passing the exam, the student's final grade will be exclusively composed of the grade obtained in the exam. - The exams of May and June of the 24/25 academic year (January and May of the 24/25 academic year in the double degree in ADE+D) will be graded out of 7. The exam of January of the 24/25 academic year (June of the 24/25 academic year in the double degree in ADE+D) will be graded out of 10.	70.0
SE3	Seminarios, trabajos, prácticas e	The practical activities, online exams and/or presentation of assignments (3 points) carried out individually or in groups are intended to apply the theoretical knowledge and develop the necessary skills in the field of Operations Management. The	30.0

informes
escritos y/o
presentación
pública de los
mismos.

specific content of this series of activities will be defined by the professor at the beginning of the course for that group to be carried out during the four-month period in which the subject is taught. In this regard:

- The score of this instrument (SE3) will be part of the final grade of the evaluation only in the case of exceeding the minimum grade established for the exam (50%) (SE1).

- The score of this instrument (SE3) is not recoverable. It will be considered in the May and June calls for the 24/25 academic year (January and May calls of the 24/25 academic year for the double degree ADE+D). The grade for the January exam of the 24/25 academic year (the June exam of the 24/25 academic year for the double degree ADE+D) will consist only of the grade obtained in the exam out of 10 points.

9. Exam dates

<https://www.um.es/web/estudios/grados/ade/2024-25#examenes>

10. Learning outcomes

At the end of this course students will have acquired the general and specific skills indicated in this guide. More precisely, students should be able to:

- Understand the basic concepts of Operations Management
- Identify the main tools, techniques and procedures regarding the different decisions in Operations Management
- Solve Problems related to Operations Management

11. Bibliography

Basic bibliography

- [Heizer, Jay; Render, Barry; Munson, Chuck \(2017\): Operations management: Sustainability and Supply Chain Management, 12 ed. Pearson Education, Inc., USA. ISBN 10: 0-13-413042-1.](#)

Further reading

- [Francisco Javier Miranda González, Sergio Rubio Lacoba y Antonio Chamorro Mera \(2014\): Dirección de Operaciones. Casos prácticos y recursos didácticos. Ediciones Paraninfo S.A.](#)
- [Jay Heizer, Barry Render. \(2015\): Dirección de la producción y de operaciones: Decisiones estratégicas \[Recurso electrónico\], 11 ed, Editorial: Pearson, ISBN: 9788490352892 9788490352892](#)
- [Jay Heizer, Barry Render. \(2015\): Dirección de la producción y de operaciones: Decisiones tácticas \[Recurso electrónico\], 11 ed, Editorial: Pearson, ISBN: 9788490352854 9788490352861 Nueva Referencia Bibliográfica](#)

- [Lluís Cuatrecasas Arbós. \(2011\): Organización de la producción y dirección de operaciones: sistemas actuales de gestión eficiente y competitiva, Centro de Estudios Ramón Areces, 2000. ISBN 84-8004-413-6.](#)
- [Manoj K. Malhotra, Lee J. Krajewski, Larry P. Ritzman. \(2013\): Administración de operaciones: Procesos y cadena de suministro \[Recurso electrónico\], México : Pearson Educación, 2013.](#)

12. Remarks

This subject is not directly linked to the Sustainable Development Goals

SPECIAL EDUCATIONAL NEEDS

Those students with disabilities or special educational needs may contact the Service of Attention to Diversity and Volunteering (ADYV - <https://www.um.es/adyv>) to receive guidance on better use of their training process and, where appropriate, the adoption of measures of equalization and improvement for inclusion, under the Rectoral Resolution R-358/2016. The treatment of information about this student body, in compliance with the LOPD, is strictly confidential.

STUDENT EVALUATION REGULATIONS

Article 8.6 of the Student Evaluation Regulation (REVA) provides that "except in the case of activities defined as compulsory in the teaching guide, if the student is unable to follow the continuous evaluation process due to duly justified supervening circumstances, he/she shall be entitled to take a global test".

It is also recalled that Article 22.1 of the Student Evaluation Regulations (REVA) stipulates that "the student who uses fraudulent conduct, including the improper attribution of identity or authorship, or is in possession of means or instruments that facilitate such conduct, will obtain a grade of zero in the evaluation procedure and, where appropriate, may be subject to sanction, after opening disciplinary proceedings".