



UNIVERSIDADE LUSÍADA
LISBOA

Course Unit Program
OPERATIONAL MANAGEMENT

Academic Year 2023/2024

1. Organic Unit

Faculty of Business and Economic Sciences

2. Course

BUSINESS MANAGEMENT

3. Cycle

2nd

4. Course Unit

OPERATIONAL MANAGEMENT (70202)

5. Scientific Area

6. Curricular Year

1st

7. Type of Curricular Unit / Semester

2nd Semester



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8. Class type and workload (work time)

Theoretical classes:

Practical classes:

Theoretical-Practical Classes 15,00

Tutorial Guidance: 20,00

9. ECTS Credits

7,50

10. Scientific Area Coordinator

11. Regent

Prof. Doutora MARIA MANUELA MARTINS SARAIVA SARMENTO COELHO

12. Assistants

13. Teaching Language

Portuguese

14. General Objectives

The general objectives of the "Operations Management" curricular unit are to deepen the knowledge acquired in the degree, so that the future master can contribute to management, within the scope of the service or manufacturing industry.

15. Specific Objectives

Provide the student with a complementary level of competences following the degree, in the specific area of Operations and particularly in the domain of the tools used in quality management, project management, and process management considering the decision-making in strategic planning, tactical and operational.

16. Skills to be acquired

The main skills to be acquired will be:

- Ability to formulate problems, in the specific domains mentioned, in semi-structured and unstructured situations.
- Ability to use in an adjusted way the instruments that allow to obtain the solutions.
- Ability to analyze results and develop new or improvement plans.

17. Teaching Methodology

The sessions will allow to obtain a solid theoretical formation, in the specified domains, always materialized by applications of a practical nature, which allow to consolidate and clarify the knowledge about the taught subjects. Students throughout the curricular unit will develop group work (case studies) and individual work (problems).



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18. Course Unit Program

HISTORICAL FRAMEWORKS OF PRODUCTION AND OPERATIONS MANAGEMENT

FUNDAMENTAL CONCEPTS OF MANAGEMENT OF PRODUCTION AND OPERATIONS

The 5 P's of production management

Open and closed system

Integration of production and operations management into the business strategy

Production management perspectives

Production function

Operations manager skills

Decision-making

MANUFACTURING INDUSTRY AND SERVICE INDUSTRY

Comparison between manufacturing and services

Service as a complement to manufacturing

Industry trends

QUALITY AND COSTS IN THE INDUSTRY

Concept of quality

Evolution of the quality concept

Quality management process requirements

Quality costs

Characterization of quality costs

Prevention

Bathtub curve

Failures

Internal failure costs

Recovery costs

TOTAL QUALITY

Main methodologies: Deming, Taguchi

Total quality control system

Principles

Total quality control system requirements

TOTAL QUALITY MANAGEMENT

Concept and characterization of total quality management

Principles of total quality management

Total quality management techniques

Implementation of a total quality management strategy

Quality management methods

ISO series 9000

ISO series 14000

Quality circles



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Taguchi Statistical Methods
Ishikawa Methods
Pareto method
Inspection of total quality management

COMPETITOR ENGINEERING

Concept
Comparison of competitor engineering and engineering
Transfer of decision-making power
Advantages and disadvantages

PRODUCTION AND OPERATION SYSTEM

Organization of the production system
Continuous production
Repetitive production
Discontinuous production
Production by project or work

OPERATION LAYOUT STRUCTURE

Types of structure and layout
Procedural structure - job shop
Product structure - flow shop
Intermediate structure
Group technology
Production vs. Customer relationship

OPERATIONS MANAGEMENT PLANNING

Strategic planning
Tactical planning
Production planning
Summary of planning

9 PRACTICAL CASES

19. Assessment Methods

Group work (with 2 students) with report, oral presentation and debate.
1 test.

20. Didactic Resources

Presentation of lessons in PowerPoint.
Recommended reading.
Databases of scientific publications from the Lusíada University media library.
Articles given by the teacher for analysis.



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21. Sustainability Objectives

The decision making must be based on the sustainability axes: economic, social and environmental.

Economic: adopt measures aimed at increasing their efficiency to generate jobs and remunerate the invested capital.

Social: respect human rights, promote equal opportunities, acting fairly with their employees and stakeholders.

Environmental: focus their efforts on conserving and managing natural resources, as well as protecting the landscape and the surrounding environment.

22. Keywords

Operations Management.

Planning.

Cost control.

Statistical quality control.

Total quality manage



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23. Main Bibliography

Author(s): R. B. Chase; N. J. Aquilano e F. R. Jacobs
Title: Production and Operations for Competitive Advantage
Edition: 11.^a Year: 2011
Local: EUA
Publisher: McGraw Hill/

Author(s): Heizer, Jay; Render, Barry; Munson, Chuck
Title: Operations Management - Sustainability and Supply Chain Management
Edition: 12.^a Year: 2017
Local: EUA
Publisher: Pearson

Author(s): Slack, N.; Jones, A.B.; Johnston, R.
Title: Operations Management
Edition: 7.^a Year: 2014
Local: EUA
Publisher: Pearson

24. Complementary Bibliography

Author(s): Reid, R.; Sanders, N.R.
Title: Operations Management
Edition: 5.^a Year: 2013
Local: New Jersey
Publisher: John Wiley

Author(s): Stevenson, William J.
Title: Operations Management
Edition: 13.^a Year: 2017
Local: New York
Publisher: McGraw-Hill Education



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Ficha técnica MIP / MIP Datasheet	
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Autor / Author	Prof. Doutora MARIA MANUELA MARTINS SARAIVA SARMENTO COELHO
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