

## COURSE OUTLINE: OPERATIONS MANAGEMENT

### GENERAL

|                                                                                                                                                                                                                                                                   |                                                                                                   |                              |                |
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| <b>SCHOOL</b>                                                                                                                                                                                                                                                     | Economics and Management                                                                          |                              |                |
| <b>ACADEMIC UNIT</b>                                                                                                                                                                                                                                              | Economics                                                                                         |                              |                |
| <b>LEVEL OF STUDIES</b>                                                                                                                                                                                                                                           | Undergraduate                                                                                     |                              |                |
| <b>COURSE CODE</b>                                                                                                                                                                                                                                                | <b>OE702</b>                                                                                      | <b>SEMESTER OF STUDY</b>     | 7th (Major C)  |
| <b>COURSE TITLE</b>                                                                                                                                                                                                                                               | <b>Operations Management</b>                                                                      |                              |                |
| <b>INSTRUCTOR(S)</b>                                                                                                                                                                                                                                              | <b>Professor Y. Stamboulis</b>                                                                    |                              |                |
| <b>INDEPENDENT TEACHING ACTIVITIES</b><br><i>where credit is awarded for discrete parts of the course e.g. lectures, laboratory exercises, etc. If credit is awarded for the whole course, indicate the weekly teaching hours and the total number of credits</i> |                                                                                                   | <b>WEEKLY TEACHING HOURS</b> | <b>CREDITS</b> |
| Lectures and Practice Exercises                                                                                                                                                                                                                                   |                                                                                                   | 3                            | 6              |
| <i>Add rows if necessary. The teaching organisation and the teaching methods used are described in detail in 4.</i>                                                                                                                                               |                                                                                                   |                              |                |
| <b>COURSE TYPE</b><br><i>general background,<br/>special background,<br/>specialized general<br/>knowledge, skills<br/>development</i>                                                                                                                            | Special background                                                                                |                              |                |
| <b>PREREQUISITE COURSES:</b>                                                                                                                                                                                                                                      | No                                                                                                |                              |                |
| <b>LANGUAGE OF INSTRUCTION<br/>and<br/>EXAMINATIONS:</b>                                                                                                                                                                                                          | Greek                                                                                             |                              |                |
| <b>IS THE COURSE OFFERED TO<br/>ERASMUS STUDENTS</b>                                                                                                                                                                                                              | Yes                                                                                               |                              |                |
| <b>COURSE WEBSITE (URL)</b>                                                                                                                                                                                                                                       | <a href="https://eclass.uth.gr/courses/ECON_U_145/">https://eclass.uth.gr/courses/ECON_U_145/</a> |                              |                |

### LEARNING OUTCOMES

#### Learning Outcomes

*The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.*

*Consult Appendix A*

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

The aim of the course is to familiarize students with and deepen their understanding of modern approaches to the management of business operations and organizations. Operations management or operations management is concerned with the in-depth

study of the design, control and operation of product and service production systems (enterprises, non-profit organisations, organisations such as hospitals, universities, etc.). The aim is to gain a critical understanding of the processes and structures that make up a production system so that its behaviour can be analysed, designed and controlled.

Upon completion of the course, students should be able to:

- Understand the role of Operations Management in the construction, manufacturing and services sectors.
- Evaluate the role and importance of Operations Management.
- Recognise the business strategy and the role of human resources in an organisation.
- Critically analyse the principles and assumptions on which a business management system has been structured and the consequences of these choices.

### General Competences

*Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?*

|                                                                                                             |                                                                                                 |
|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <i>Search for, analysis and synthesis of data and information, with the use of the necessary technology</i> | <i>Project planning and management</i>                                                          |
| <i>Adapting to new situations</i>                                                                           | <i>Respect for difference and multiculturalism</i>                                              |
| <i>Decision-making</i>                                                                                      | <i>Respect for the natural environment</i>                                                      |
| <i>Working independently</i>                                                                                | <i>Showing social, professional and ethical responsibility and sensitivity to gender issues</i> |
| <i>Team work</i>                                                                                            | <i>Criticism and self-criticism</i>                                                             |
| <i>Working in an international environment</i>                                                              | <i>Production of free, creative and inductive thinking</i>                                      |
| <i>Working in an interdisciplinary environment</i>                                                          | <i>.....</i>                                                                                    |
| <i>Production of new research ideas</i>                                                                     | <i>Others...</i>                                                                                |
|                                                                                                             | <i>.....</i>                                                                                    |

- Search, analysis and synthesis of data and information, using both the necessary technologies
- Autonomous Work
- Teamwork
- Exercise of criticism and self-criticism
- Promoting free, creative and inductive thinking

### SYLLABUS

1. Introduction to Operations Management and its Strategic Role
2. Performance Targets and Production Strategy
3. Conversion Process Design
4. Supply Network Design and Site Selection
5. Spatial Planning and Process Technology

6. Organisation of Work and Nature of Planning and Control
7. Planning and Control of Production Capacity
8. Inventory and Supply Chain Planning and Control
9. Enterprise Resource Planning and Lean Manufacturing
10. Planning and Quality Control
11. Performance Measurement and Production Operation Improvement (Six sigma and Kaizen)
12. Project Planning and Control
13. Work presentations

#### TEACHING and LEARNING METHODS - EVALUATION

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                  |                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| <b>DELIVERY</b><br><i>Face-to-face, Distance learning, etc.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Classroom. Each lecture will discuss a specific chapter of Operations Management. Similarly, during the lectures students will have the opportunity to demonstrate their understanding of the subject through a range of methods such as weekly assignments, group discussions, examples, case studies and visits to industrial plants.          |                          |
| <b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b><br><i>Use of ICT in teaching, laboratory education, communication with students</i>                                                                                                                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"><li>• Supporting the learning process through institutional e-class electronic platform</li><li>• Analysis of case studies (case studies)</li><li>• Analysis of TV shows (restaurant reality series)</li><li>• Production management simulation activities through the institutional online platform</li></ul> |                          |
| <b>TEACHING METHODS</b><br><i>The manner and methods of teaching are described in detail.</i><br><i>Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.</i><br><i>The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</i> | <b>Activity</b>                                                                                                                                                                                                                                                                                                                                  | <b>Semester workload</b> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Lectures                                                                                                                                                                                                                                                                                                                                         | 39                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Tutorials that Focus on implementation methodologies and study analysis case study                                                                                                                                                                                                                                                               | 6                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Homework preparation                                                                                                                                                                                                                                                                                                                             | 70                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Independent Study                                                                                                                                                                                                                                                                                                                                | 65                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Total</b>                                                                                                                                                                                                                                                                                                                                     | <b>180</b>               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                  |                          |
| <b>STUDENT PERFORMANCE EVALUATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | I. Term assignment (70%) including:<br>-Written assignment (Analysis of an existing business by applying the modules of the course)                                                                                                                                                                                                              |                          |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><i>Description of the evaluation process</i></p> <p><i>Language of Evaluation, Evaluation Methods, Formative or Inferential, Multiple Choice Test, Multiple Choice Test, Short Answer Questions, Test Development Questions, Problem Solving, Written Work, Report, Oral Examination, Oral Examination, Public Presentation, Laboratory Work, Clinical Examination of a Patient, Artistic Interpretation, Other</i></p> <p><i>Explicitly identified assessment criteria are stated and if and where they are accessible to students.</i></p> | <p>-Public presentation</p> <p>Purpose of evaluation: To test the skills developed by students and their ability to plan and implement a project individually.</p> <p>Evaluation criteria: The degree of satisfaction of the specifications set, the classification, organisation and adaptation of the available material, the structure and clarity of the written text, the organisation and management of the work and its presentation.</p> <p>II. Weekly assignments (30%).<br/>(analysis of chapters, analysis of case studies, TV shows and visits)</p> <p>Purpose of evaluation: To check the skills developed by students during the course of the course</p> <p>Evaluation criteria: The degree of satisfaction of the specifications set, the classification, organisation and adaptation of the available material, the structure and clarity of the written text, the organisation and management of the work and its presentation.</p> |
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## RECOMMENDED-BIBLIOGRAPHY

### **Course Books**

*Alistair Brandon - Jones, Nicola Burgess, Nigel Slack (2026). Διοίκηση παραγωγής προϊόντων και υπηρεσιών, 10η αγγλική έκδοση , Κλειδάριθμος, Αθήνα*

### **Suggested bibliography**

1. Womack, J. P., & Jones, D. T. (2010). *Lean thinking. Banish waste and create wealth in your corporation*, Free Press
2. Adamidis, E. (2016). *Design and Management of Industrial Units* [Undergraduate textbook]. Kallipos, Open Academic Editions. <https://dx.doi.org/10.57713/kallipos-707> (in Greek)
3. Koulouriotis, D., & Metaxas, I. (2023). *Total Quality Management and Business Excellence* [Postgraduate textbook]. Kallipos, Open Academic Editions. <https://dx.doi.org/10.57713/kallipos-63> (in Greek)

4. *Womack, J. P. (2005) Lean solutions: how companies and customers can create value and wealth together.*