



Course Description

1. Course Unit Title	Organization and Management of Productive Systems
2. Course Unit Code	OMP208
3. Type of Course Unit	Compulsory
4. Level of Course Unit	Master
5. Year of Study	N/A
6. Term	2 nd
7. ECTS credits	7.5
8. Name of lecturers	Dr. Andreas Efstathiades Mr. Kyprianos Nicolaidis
9. Learning Outcomes of the course unit	
Upon successful completion of the course the student will be able to:	
<ol style="list-style-type: none">1. Analyze the various production process characteristics and identify how they support operations strategy through cases and Project work2. Apply workforce management techniques with emphasis on Learning curves in business cases3. Analyze capacity management concepts and apply capacity techniques in business examples.4. Apply location principles and techniques to optimize production costs5. Identify and apply layout techniques for different types of production process strategies in business examples6. Through cases apply inventory Management techniques including Just - In Time (JIT) systems in optimizing inventory levels7. Apply network models and techniques in Project Management problems8. Apply in real business Environment Total Quality Management concepts and quality Management tools and techniques	
10. Mode of Delivery	

Face- to- face
11. Prerequisites and co-requisites
None
12. Course Contents (Description, Objective)
<p>Course Objective This course is planned to expose students to basic functions of systems producing goods or delivering services. Students will review and learn how to apply various techniques for Organization and Management of Productive Systems including planning, scheduling, and controlling processes. Emphasis will be placed on the effect of those practices on the organization competitiveness</p> <p>Course Content</p> <ul style="list-style-type: none"> ▪ The Operations Function and its Environment; Historical Developments of OM. ▪ Operations strategies, Manufacturing strategies. Productivity Measurement and Trends; Competitive Priorities; Operations Role in Firm Competitiveness. ▪ Process Management, Major process decisions, vertical integration ▪ Designing processes, Business process Re- Engineering, Flow Diagrams, Process Charts, ▪ Workforce Management – The effect of Learning curves on production time ▪ Capacity planning – Tools for capacity planning ▪ Layout- Layout planning for optimum productive systems– Layout types ▪ Inventory Management – Inventory Concepts ▪ Managing Project Processes. Networks- Network planning. ▪ Design for Total Quality Management, The Elements of TQM; Generic Tools of Quality Management, Cause and Effect Diagram, Pareto Charts.
13. Recommended or Required reading
<p>E - book title: Operations Management: Processes and Supply Chains, Global Edition. Lee J. Krajewski, Larry P. Ritzman, Manoj K. Malhotra. Pearson.</p> <ul style="list-style-type: none"> ▪ R. Chaise, N. Aquilano R. Jacobs: Operations Management for Competitive Advantage, McGraw Hill. Latest edition ▪ Buurman, J., Supply Chain Logistics Management. McGraw-Hill. ▪ Christopher, M., Logistics and Supply Chain Management: Strategies for Reducing Cost

and Improving Service Financial Times. Pitman Publishing.

- Cooper, R., Supply chain development for the lean enterprise: interorganizational cost management. Routledge.
- Hugos, M.H., Essentials of Supply Chain Management. John Wiley & Sons.

Journal Papers:

- Vasilis Theoharakis, Chris Voss, George C. Hadjinicola Andreas C. Soteriou,
- Insights into factors affecting Production and Operations Management (POM) journal evaluation. Journal of Operations Management, Volume 25, Issue 4, June 2007, Pages 932-955
- Robert Joppen, Sebastian von Enzberg, Dr. -Ing. Arno Kühn, Prof. Dr. -Ing. Roman Dumitresc. A practical Framework for the Optimization of Production Management Processes
- Procedia Manufacturing, Volume 33, 2019, Pages 406-413
- R. S. Selladurai, Mass customization in operations management: oxymoron or reality? Omega, Volume 32, Issue 4, August 2004, Pages 295-300
- MIDOR, Katarzyna, KUČERA, Marian, Improving the Service with the Servqual Method, Management Systems in Production Engineering. 2018, Vol. 26 Issue 1, p60-65. 6p.

14. Planned learning activities and teaching methods

Students are asked to solve questions related to the organization and Management of Productive Systems. Case study questions are always available to support the learning activity and critical thinking.

15. Assessment methods and criteria

Final Exam: 60%

Assignments: 30%

Attendance/ Participation: 10%

16. Language of Instruction

English

17. Work Placement

Optional