

COURSE OUTLINE [OPERATIONS MANAGEMENT]

1. GENERAL

SCHOOL	Business Administration		
ACADEMIC UNIT	Business Administration		
LEVEL OF STUDIES	Postgraduate		
COURSE CODE	DE0202-02	SEMESTER	A'
COURSE TITLE	OPERATIONS MANAGEMENT		
INDEPENDENT TEACHING ACTIVITIES	WEEKLY TEACHING HOURS	CREDITS	
Lectures, Essay, Presentation	3	6	
COURSE TYPE	GENERAL BACKGROUND		
PREREQUISITE COURSES:	NONE		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	GREEK		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE WEBSITE (URL)	https://www.uom.gr/assets/site/public/nodes/8565/13468-2022-2023_Dioikisi_Leitourgion_Tsiotras.pdf https://openeclass.uom.gr/courses/INTER1112/		

2. LEARNING OUTCOMES

<p>Learning outcomes</p> <p>The primary objective of this course is to provide specialized and cutting-edge knowledge in relation to the issues of operations management and their strategic importance in any organization. The objective is for students to gain a basic understanding of the main challenges and problems faced by operations management executives in both industry and service organizations and to apply critical thinking and state of the art methods and tools, in order to make the corresponding decisions. The course introduces students to the basic principles, theories, methodologies and practices of operations management and helps them to understand and critically view its role within a firm, its role in increasing competitiveness and its interaction with other core business functions. Key areas of operations management are presented and analyzed, as well as the necessary tools and techniques used for successful decision making in these areas. As a result, the course offers students specialized problem-solving skills in the respective subjects. Each course is devoted to a specific topic of Operations Management (Demand Forecasting; Site Selection; Spatial Planning; Capacity Planning; Product design, Process Design; Inventory Management, Just-In-Time (JIT) Systems & Lean Manufacturing Time Based Competition (TBC), Supply Chain Management (SCM). The topics are systematically analyzed and the corresponding scientific developments are presented. Theory and practice are combined through the study of real cases in Greek and global companies, cultivating the students' critical thinking. Finally, students study in teams and present in class, challenges and best practices from industry-leading companies in operations areas, offering significant stimuli for their subsequent research and/or professional activity.</p>
<p>General Competences</p> <p>The course aims at <u>the following</u>:</p> <ul style="list-style-type: none"> • To enable students to search, analyze and synthesize available data and information, using the respective methods and tools that are taught in class. • To help students to make decisions on important Operations Management issues • To encourage and cultivate teamwork • To support work in an international environment • To support project planning and management • To promote free, creative and inductive thinking

3. SYLLABUS

Production and Operations Management (POM) is a discipline concerned with the effective design, planning and control of an organization's resources for the provision of both goods and services. This includes also the effective coordination with other functions within the organization and a clear awareness of how operations support or even shape the strategy of the organization. This course provides students with an overview of theory, concepts, methodologies and applications of operations management and discusses the evolution and implementation of recent trends in the area. The primary objective of the course is the improved understanding of operational problems and their strategic importance. It emphasizes the co-ordination contributions of all functional areas, while concentrating on that function of the organization which is concerned with all those value added activities that transform inputs into outputs. Students will acquire a basic knowledge concerning the main problems and decision making areas that operations managers face in different manufacturing and service organizations, as well as a sufficient background on how to analyze these problems effectively and efficiently. Obviously, POM applies to manufacturing, as well as to service organizations, public or private, profit or non-profit. Many MBAs obtain jobs in this field, since it is usually the Operations Management function of an organization that employs the most people and uses most of the assets. The skills needed for POM are thus highly regarded by potential employers. The POM course is a starting point. Though it will not equip students to take over immediate running of, say, a large hospital or factory, it will equip them with the necessary knowledge and skills on which they can build. Whatever position students may eventually hold in an organization, the course will offer them an appreciation of the role of the operations manager and it will show them how theory can be applied in practice in a variety of organizations. Finally, it is now clear that integration and coordination within the supply chains is the essential management art for business to prosper in the future. This course will therefore emphasize the need to coordinate not only with other functions within a company, but also with suppliers and customer throughout the supply chain.

Each lecture will be devoted to a particular topic of Operations Management. Topics are treated systematically and in a logical sequence and lectures are used as a framework for individual student study. Theory and practice are combined through case studies.

Indicative topics covered by the course include: Introduction to Operations Management - The Strategic Role of Operations Management in the Global Competitive Environment - Demand Forecasting - Facility Location Selection - Strategic Process & Layout Selection - Capacity Planning - Production Planning - Inventory Management - JIT Systems & Lean Management, - Supply Chain Management (SCM) - Case Studies

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY.	Face-to-face, Distance learning	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	<p>The Open-e-Class e-learning platform is used to support the organization of the course. All slides, examples, case studies, scientific articles, or any other material related to the course are posted there. Both the platform and e-mail are used as a means of communication with the students.</p> <p>Websites related to the subject and individual sections of the course are suggested.</p> <p>Material from these websites is used in understanding the course and in presenting best practices and examples.</p>	
TEACHING METHODS	Activity	Semester workload
	Lectures	36 hours (12 lectures * 3 hours each)
	Study and analysis of bibliography	108 (3 hours for each hour of lecture)
	Project (written report)	25 hours
	Project (presentation)	5 hours
	Course total	174 hours
STUDENT PERFORMANCE EVALUATION	<p>Language of Evaluation: Greek</p> <p><u>Evaluation criteria:</u></p> <p>Written exam at the end of the semester (short answer questions, multiple choice questions, problem solving)</p> <p>Group project</p> <p>Presentation of the Group Project</p> <p>The individual criteria, as well as the exact weight of each in the overall evaluation of the students, are presented in the classroom at the beginning of the semester and are explicitly mentioned in the course outline. The objective and reliable assessment of student performance is ensured through the multiple assessment methods, the multiple topics in the written exams (open questions – multiple choice questions – exercises), as well as the frequent change of these topics.</p> <p>The transparency of the assessment is ensured by students having the possibility to see their papers and assignments within a period of approximately one month from the day their grades are announced, so that any questions or objections can be resolved</p>	

5. ATTACHED BIBLIOGRAPHY

<p>Suggested bibliography:</p> <ul style="list-style-type: none"> • Heizer J., Render B., Munson C., Operations Management - Sustainability & Supply Chain Management, Broken Hills Publishers Ltd., 2020, Lefkosia. • Jacobs, R. & Chase, R., «Operations & Supply Chain Management», 1st Greek edition, Broken Hills Publishers Ltd., Lefkosia, 2012. • Operations Management for Competitive Advantage, Chase, Jacobs, Aquilano, 11th edition, McGraw Hill, 2006. • Production and Operations Management, Norman Gaither, Dryden Press. • Production / Operations Management, William J. Stevenson, Irwin Inc. • Operations Management: Strategy and analysis, Lee J. Krajewski and Larry P. Ritzman, Addison-Wesley. • Production/ Operations Management: concepts and situations, Roger W. Schemer, Macmillan. • Decision Support Systems for Production and Operations Management, Vahid Lofti and C. Carl Pegels, Richard Irwin, Inc. • Applied Production and Operations Management, J. Evans, D. Anderson, D. Sweeney, T. Williams, West Publishing Company. • Production/ Operations Management, Thomas Hendrick, Franklin Moore, Richard Irwin, Inc. • Operations Management, James Dilworth, Mc Graw-Hill. • IS-QSOM, Quantitative Systems for Operations Management, Prentice Hall. • Production and Operations Management, Heizer and Render, Allyn and Bacon • Just-In-Time Management, M. J. Schniedejans, Allyn and Bacon.
--

- Operations Management-Concepts, Methods and Strategies, M. A. Vonderembse and G. P. White, West Publishing Co.
- Operations Management-Principles & Practice, Tomes A. and Hayes M., Prentice Hall.
- Fundamentals of Production/Operations Management, W. A. Ruch, H. E. Feacon, C. D. Wiefers, West Publishing.
- Operations Management: Serving the Customer, R.J. Schonberger, E. M. Knod, Business Publications Inc.
- Production/Operations Management: Text and Cases, T. Hill, Prentice Hall.
- Restoring our Competitive Edge: Competing through Manufacturing, R. Hayes and S.C. Wheelwright., J. Wiley & Sons.
- Essentials of Production and Operations Management, R. Wild, Casell.
- Manufacturing Strategy: Formulation and Implementation, G. R. Greenhalgh.
- The Essence of Operations Management, Terry Hill , Prentice Hall.
- Business Logistics Management, Ronald H. Ballou, Prentice Hall.
- Service Operations Management, Robert G. Murdick, Barry Render, Roberta S. Rusell, Prentice Hall.
- Production and Operations Management, Everett E. Adam, Jr. and Ronald J. Ebert, 5th edition, Prentice Hall.
- Διοίκηση Παραγωγής, Σύγχρονες Προσεγγίσεις, Κ. Δεββισιώτη, Αθήνα 1993.
- Operations Management Cases, W. Gehrleim, McGraw Hill, 2006.
- Operations Management, fourth edition, Slack, Chambers, Johnston, Prentice Hall, 2004.
- Operations Management for MBAs, second edition, Meredith, Shafer, Wiley, 2002.
- Supply Chain Management, second edition, Chopra, Meindl, Prentice Hall, 2004.
- Production and Operations and Analysis, Steven Nahmias, 6th edition, Irwin, 2006

Related Academic Journals

- International Journal of Operations and Production Management
- International Journal of Productivity and Performance Management
- International Journal of Services and Operations Management
- International Journal of Production Research
- Management Science
- International Journal of Business Performance Management
- Business Process Management Journal
- Production Planning and Control
- Operations Management Review
- Industrial Management & Data Systems
- Journal of Quality Technology
- Journal of Manufacturing Technology Management
- International Journal of Quality & Reliability Management
- Cost and Management
- Supply Chain Management Review (www.scmr.com)
- International Journal of Manufacturing Technology and Management
- Managerial Auditing Journal
- Logistics Information Management
- Integrated Manufacturing Systems
- Journal of Operations Management

Related websites

- Associated Quality Consultants, Inc: A large collection of free quality information.
www.quality.org
- National Quality Research Center, at University of Michigan
www.acsi.asqc.org
- Total Quality Engineering "dedicated to improving business competitiveness through quality tools, principles, and techniques"
www.tqe.com
- At MIT, there is a Center for Technology, Policy and Industrial Development,
<http://web.mit.edu/ctpid/www/>
- Warwick Business School in the UK, has a collection of Operations Management Links, including an Operations Management screensaver.
<http://www.wbs.warwick.ac.uk/omindex/>
- The essential idea of poka-yoke is to design your process so that mistakes are impossible or at least easily detected and corrected.
<http://www.cox.smu.edu/jgrout/pokayoke.html>
- A non-profit organization, about quality, creativity and innovative management.
www.goalqpc.com
- Productivity, Inc.
<http://www.mfgnet.com> <http://www.productivity-inc.com>
- The Agility Forum
<http://www.agilityforum.org/>
- Learn about the International Standards Organization (ISO) at the ISO homepage:
www.iso.ch/welcome.html
- Business Research in Information and technology
<http://www.brint.com/>

To check out the latest in freeware, shareware, demos and trial business software, try

- http://www.softseek.com/Business_and_Productivity/ and for business simulations
- http://www.softseek.com/Games/Business_Simulations/
- Industrial Technology Institute, Performance Benchmarking Service
<http://www.iti.org/pbs/aboutus.htm>
- Computer Aided Assembly Planning at Wright State University
<http://www.cs.wright.edu/research/caap/default.html>
- National Association of Manufacturers host a site called Manufacturing Central
<http://www.nam.org/>
- Coalition for Intelligent Manufacturing Systems
<http://www.sayer.com/CIMS/>
- Intelligent Manufacturing Systems, a non-profit org.
<http://www.ims.org/>
- U.S. Government's National Institute for Standards and Technology
<http://www.nist.gov/>
- American Supplier is a non-profit organization specializing in supply issues.
<http://www.amsup.com/>
- Institute for operations research and management sciences.
<http://www.informs.org/>
- Interesting demos of management information systems <http://www.man.ac.uk/idpm/isdemo.htm>
- State of the Art Practices in Operations From Toyota Company
<http://www.toyota.com/about/operations>
<http://www.toyota.co.jp/en/index.html>
- State of the Art Practices in Operations From Ford Motor Company
<http://www.ford.com>
- Greek Journal PLANT, For Practitioners In Operations Management
<http://www.plant-management.gr>
- Collection of Scientific Journals
<http://www3.lib.uom.gr/dbases/>
<http://heal-1.physics.auth.gr/heal-linksearch/>
- http://harvardbusinessonline.hbsp.harvard.edu/b01/en/academic/edu_home.jhtml?_requestid=37379 (Cases from Harvard Business School)
- Council of Supply Chain Management Professional (www.cscmp.org)
- Hellenic Logistics Company, Thessaloniki Branch
<http://www.logistics.org.gr>
- The Economist: www.economist.com
Financial Times: www.ft.com