

<b>Course title</b>	Operations Management
<b>Course code</b>	
<b>Type of course</b>	Elective
<b>Level of course</b>	Postgraduate
<b>Year of study</b>	Second (2 <sup>nd</sup> )
<b>Semester</b>	Third (3 <sup>d</sup> )
<b>ECTS credits</b>	5
<b>Name of lecturer(s)</b>	Associate Professor Ioannis Giannikos Assistant Professor Andreas Nearchou
<b>Aim of the course</b>	<p>This course is concerned with the fundamental operations of a business or an organization and the way these operations affect its competitiveness and future prospects. These operations refer to the design and the production of the right products and services, at the right quality, with the right cost and their distribution to the customers at the right time. Students will be introduced to the basic methodologies with which these operations may be designed and implemented efficiently and effectively.</p> <p>Moreover, the lesson covers in introductory level all the issues and topics of knowledge needed for the managers to manage projects effectively.</p>
<b>Learning outcomes</b>	<p>At the end of this course the student should be able to:</p> <ol style="list-style-type: none"> <li>1. Understand the significance of business operations and their relationship with the overall business strategy.</li> <li>2. Understand the basic methodologies for the design of products and services.</li> <li>3. Comprehend the basic methodologies for production process design.</li> <li>4. Understand the elements of location analysis models.</li> <li>5. Understand the basic methods and techniques for efficient project management.</li> </ol>
<b>Competences</b>	<p>At the end of the course the student will have further developed the following skills/competences:</p> <ol style="list-style-type: none"> <li>1. Understanding the House of Quality</li> </ol>

	<p>methodology for the design of products and services.</p> <ol style="list-style-type: none"> <li>2. Implementation of basic location analysis models and solution by using relevant software.</li> <li>3. Use the basic methods for planning, scheduling and controlling projects.</li> </ol>
<b>Prerequisites</b>	<p>There are no prerequisite courses. It is, however, recommended that students have at least a basic knowledge of Differential and Integral Calculus as well as Statistics.</p>
<b>Course contents</b>	<ol style="list-style-type: none"> <li>1. Part A: Operations Management and the Business Strategy <ol style="list-style-type: none"> <li>1.1. Strategy of Production Systems</li> <li>1.2. Fundamentals of Decision Analysis</li> <li>1.3. Data Envelopment Analysis (DEA)</li> <li>1.4. Design of Products and Services</li> <li>1.5. Facility Location</li> <li>1.6. Process Design</li> </ol> </li> <li>2. Part B: Introduction to Project Management <ol style="list-style-type: none"> <li>2.1. The importance of project management: planning and organizing projects.</li> <li>2.2. Project scheduling. The PERT/CPM method.</li> <li>2.3. Economic aspects of projects. Projects crashing.</li> <li>2.4. Resource scheduling. <ol style="list-style-type: none"> <li>2.1. Resource leveling.</li> </ol> </li> </ol> </li> </ol>
<b>Recommended reading</b>	<ol style="list-style-type: none"> <li>1. Chase, R. B., Jacobs, F. R., &amp; Aquilano, N. J. (2004). <i>Operations management for competitive advantage</i> (10th ed.). Boston: McGraw-Hill/Irwin</li> <li>2. Slack N (2004). <i>Operations Management</i>, (Fourth edition), Financial Times</li> <li>3. Krajewski L. and L. Ritzman (1996). <i>Operations Management, Fourth Ed.</i>, Addison-Welsley</li> <li>4. S. Nahmias, (1994). <i>Production and Operations Analysis</i>, third Edition, Irwin, 1997.</li> <li>5. R. Anupindi, S. Chopra, S.D. Deshmukh (1999). <i>Managing Business Process Flow</i>, First Edition, Prentice Hall..</li> <li>6. William J. Stevenson (1999). <i>Production/Operations Management</i>, Sixth Edition, Irwin/McGraw-Hill</li> <li>7. Russel R. and B. Taylor (2000). <i>Operations Management</i>, Third Edition, Prentice Hall.</li> <li>8. Heizer J. and Render B. (2000). <i>Principles of</i></li> </ol>

	<p>Operations Management, Fourth Edition, Prentice Hall.</p> <p>9. Ahuja H. N., Dozzi S. P. and AbouRizk S. M. (1994), Project Management: Techniques in Planning and Controlling Construction Projects, 2nd Edition Wiley.</p> <p>10. Kerzner H. R. (2013), Project Management: A Systems Approach to Planning, Scheduling, and Controlling (11<sup>th</sup> Edition), Wiley.</p> <p>11. Shtub A., Bard J. F. and Globerson S. (2004), Project Management: Processes, Methodologies, and Economics (2<sup>nd</sup> Edition), Pearson.</p>
<b>Teaching and learning methods</b>	Lectures
<b>Assessment and grading methods</b>	The grade is calculated as the weighted average of the final written exam (70%) and a series of assignments (30%), provided that the grade of the written exam is at least 5. Greek grading scale: 1 to 10. Minimum passing grade: 5
<b>Language of instruction</b>	Greek.