

**Module (Course Syllabus) Catalogue**

**2022-2023**

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| **College/ Institute** | **Erbil Administrative Technical College** | |
| **Department** | **Department of Technical Management** | |
| **Module Name** | **Production and Operation Management** | |
| **Module Code** | **POM701** | |
| **Degree** | **Technical Diploma Bachelor High Diploma Master PhD** | |
| **Semester** | **7th** | |
| **Qualification** | **Master in business management** | |
| **Scientific Title** | **Lecturer** | |
| **ECTS (Credits)** | **8** | |
| **Module type** | **Prerequisite Core Assist.** | |
| **Weekly hours (theory)** | **3 hours** |  |
| **Weekly hours (Practical)** | **( 2 ) hr Class** | **( ) Total hrs Workload** |
| **Number of Weeks** | **15** | |
| **Lecturer** | **Baderkhan Abdulla Omer** | |
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| **Websites** |  | |
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**Course Book**

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| **Course**  **Description** | This course is an introduction to the concepts, principles, problems, and practices of operations management. Emphasis is on managerial processes for effective operations in both goods-producing and service-rendering organization. Topics include operations strategy, process design, capacity planning, facilities location and design, forecasting, production scheduling, inventory control, quality assurance, and project management. The topics are integrated using a systems model of the operations of an organization. | | | | |
| **Course objectives** | This course aims to improve students understanding of the concepts, principles, problems, and practices of operations management. After completing this course, students should be able to:  ➢ Develop an understanding of and an appreciation for the production and operations management function in any organization.  ➢ To understand the importance of productivity and competitiveness to both organizations and nations.  ➢ To understand the importance of an effective production and operations strategy to an organization.  ➢ To understand the various production and operations design decisions and how they relate to the overall strategies of organizations.  ➢ To understand the importance of product and service design decisions and its impact other design decisions and operations.  ➢ Obtain an understanding of quality management practice in organizations and how total quality management and six-sigma facilitate organizational effectiveness.  ➢ To understand the relationship of the various planning practices of capacity planning, aggregate planning, project planning and scheduling.  ➢ To understand the roles of inventories and basics of managing inventories in various demand settings  ➢ To understand contemporary operations and manufacturing organizational approaches and the supply-chain management activities and the renewed importance of this aspect of organizational strategy | | | | |
| **Student's obligation** | • Reading and understanding of study notes  • Participation in forum and discussions  • Participation in active communication with the lecturer  • Regular assignment submission and do self-evaluation quizzes regularly  • Lab required during studying  The attendance of students in lectures will have extra credit. He / she is required to continuously follow the lectures, submits homework and assignments. Expect quizzes any time. | | | | |
| **Required Learning Materials** | Lectures notes, videos, audios, platform-based conferences, homework exercises, homework correction and guidance, live consultation and problem-solving, self-study. Hall, projector, lab materials. | | | | |
| **Evaluation** | ‌ **Task** | | **Weight (Marks)** | **Due Week** | **Relevant Learning Outcome** |
| Paper Review | |  |  |  |
| **Assignments** | Homework | 6% | 4th & 6th |  |
| Class Activity | 2% | All |  |
| Report | 8% | 5th |  |
| Seminar | 8% | 2nd |  |
| Essay | 8% | 8th |  |
| Project |  |  |  |
| Quiz | | 4% | All |  |
| Midterm Exam | | 24% |  |  |
| Final Exam | | 40% |  |  |
| Total | | 100% |  |  |
| **Specific learning outcome:** | 1. The importance of maximize the use of the firm’s resources. 2. How to provide the required level of customer service. 3. How to get the most value out of resources and production processes. 4. Manipulate management systems and tools and to fil systems 5. Manage the stock | | | | |
| **Course References‌:** | 1. **Albert porter. 2009. operation management. published by book boon.com.** 2. **S. N. Chary. 2009. production and operation management. 4th edition. Tata McGraw-Hill Education. india.** 3. **Linda L. Brennan, 2011. operation management. McGraw-Hill. united states** 4. **S. Anik kumar, N. Suresh. 2006. operation and production management. 9th edition. india.** | | | | |
| **Course topics (Practical)** | | | | **Week** | **Learning Outcome** |
| What is Operations Management? Manufacturing and Service Operations, The Systems View of Operations Management, The Process View of Organizations | | | | 1st | **1** |
| Operations Strategy, Levels of Strategy, The Role of Operations in Strategy Development, Operations Competitive Priorities | | | | 2nd | **1** |
| Product Design and Process Selection, Product Screening, Preliminary Design, Final Design | | | | 3rd | **4** |
| Methods for Improving Product Design, Process Selection, Total Quality Management, The Cost of Quality, Quality Systems | | | | 4th | **4** |
| Supply Chain Management, Supply Chain Procurement, Supply Chain Distribution, JIT and Lean Systems | | | | 5th | **3&4** |
| Eliminate Waste, Continuous Improvement, JIT Pull Systems | | | | 6th | **5** |
| **Midterm Exam** | | | | | |
| Identifying Capacity Requirements, Evaluating Capacity Plans, Facility Location and Layout | | | | 7th | **2** |
| Work Systems Design, Job Enlargement, Job Enrichment | | | | 8th | **2** |
| Work Measurement, Project Management, Project Management Activities | | | | 9th | **4** |
| Network Analysis, Inventory Management, Dependent Demand, Independent Demand | | | | 10th | **2** |
| Types of Inventories, Inventory Decisions | | | | 11th | **5** |
| The Economic Order Quantity (EOQ) Model, The Re-Order Point (ROP) Model, The ABC Inventory Classification System | | | | 12th | **3** |
| **Final exam** | | | | | |
| **Questions Example Design**   |  |  | | --- | --- | | ***Compositional*** | • **In this type of exam the questions usually starts with Explain how, What are the reasons for…?, Why…?, How….?** | | ***True or false type of exams:*** | • **In this type of exam a short sentence about a specific subject will be provided, and then students will comment on the trueness or falseness of this particular sentence.** | | ***Multiple choices:*** | • **In this type of exam there will be a number of phrases next or below a statement, students will match the correct phrase.** | | ***Fill in the Blank*** | • **Fill in the blank questions are distinguished by the text box located in within the question text. Test-takers are only allowed to type one answer for each text box** | | | | | | |
| **Extra Note**  This course is organised in such a way that the theoretical concepts are applied in conjunction with the practical subject of production and operation management. Students are encouraged to search also after the regular supervised semester content. | | | | | |
| **External evaluator**  I do approve the content of this course-book. It does cover the described above. The topics are broad and are aimed to equip students with required knowledge to enable them to understand the subject. | | | | | |