**Jubail University College**



**Department of Business Administration**

**COURSE SYLLABUS - SEMESTER 322**

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| **Course Code & Number** | BUS 241 | | | |
| **Course Title**  **Skill** | OPERATIONS MANAGEMENT | | | |
| **Instructor** | MRS. SABITHA NIKETH | | | |
| **Office Location** | 423 | | | |
| **Office Hours** | **Day** | **Period** | | |
| Saturday | 1, 2 & 5 | | |
| Sunday | 4 & 5 | | |
| Monday | 1, 2, 4 & 5 | | |
| Tuesday | 4 & 5 | | |
| Wednesday | 4 & 5 | | |
| **Instructor’s Office Phone** | 03-3459000 Extension: \_\_3666\_\_ | | | |
| **Instructor’s Email** | NIKETHS@ucj.edu.sa | | | |
| **Section numbers** | **202** | |  |  |
| **Class hours** | **Day** | **Period** | | |
| Saturday | 3 (PoMktg-201) | 4 (MR-201) |  |
| Sunday | 1 & 2 (PoMktg-203) | 3 (OM-202) | 6 & 7 (PoMktg-201) |
| Monday | 3 (PoMktg-203) | 6&7 (PoMktg-202) |  |
| Tuesday | 1,2 (MR-201) | 3 (PoMktg-202) |  |
| Wednesday | 1,2 & 3 (IM-201) | 6,7 (OM-202) |  |
| **Prerequisites** | MATH 117 STATISTICL METHODS OF MANAGEMENT - I | | | |
| **Course Rationale** | Operations Management [OM] is one of the major functional branches of Business Management. This course involves operational issues of organizations from a strategic and operational perspective. Through this course the students can find answers to questions such as: How is the Mission linked to the corporate strategy and operational strategy? How goods and services are delivered with quality to the market? How do organizations respond to the demand in the market from production perspective? OM is a dynamic discipline, with new concepts being adapted for both manufacturing and service industries. Thus, Operations Management course includes the following areas for study: Production System, Capacity and Facility Location Problems, Layout Planning, Forecasting, Production Scheduling and Control, Inventory and Quality Control. | | | |
| **Course Objectives** | On successful completion of this course, the students should be able to:   1. Display an understanding of strategic importance of operations management and its emergence in contemporary global environments. 2. Demonstrate the relationship between operations management and other functional areas of the organization. 3. Able to discuss the need for operations management systems to take over production management in the organization. 4. Know the importance of consistency in producing quality and maintain process improvements. 5. Comprehend on the overall functioning of the organization. 6. Critically discuss the various managerial techniques involved in the OM. 7. Explain the problems involved in operations and suggest methods of overcoming them. 8. Lay stress on the importance of quality control and management. 9. Build up a conceptual foundation for the Operations Research course which they may take up in higher semesters. | | | |
| **Methods of Instruction** | Lecture notes, Handouts and the Student DVD available with the Text Book. | | | |
| **Required Textbook** | Heizer Jay and Render Barry, “Principles of Operations Management”, Pearson Prentice Hall, Seventh Edition, and ISBN-13: 978-0-13-500709-9. | | | |
| **Proposed Websites** | It will be informed depending upon the requirement of the assignments. | | | |
| **Grading Scheme** | 2 major quizzes 20%  Classroom Participation and Assignment 20%  Mid Term Examination 20%  Final Examination 40%  Total 100% | | | |

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| **Jubail University College Grading Scale** | | | |
| **Total Points** | **Letter Grade** | **Percentage** | **Grade Point** |
|  | A+ | 95-100% | 4.0 |
|  | A | 90-<95% | 3.75 |
|  | B+ | 85-<90% | 3.5 |
|  | B | 80-<85% | 3.0 |
|  | C+ | 75-<80% | 2.5 |
|  | C | 70-<75% | 2.0 |
|  | D+ | 65-<70% | 1.5 |
|  | D | 60-<65% | 1.0 |
|  | F | 0-<60% | 0.0 |
|  | W | Withdrawal | N/A |
|  | WP | Withdrawal while Pass | N/A |
|  | WF | Withdrawal while Fail | 0.0 |
|  | DN | Denial | 0.0 |
|  | I | Incomplete | N/A |
|  | P | Pass | N/A |

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| **Course Outline** | | | |
| **Week** | **Chapter** | **Topics & Activities** | **Notes** |
| 1 &2 | 1 | Operations and Productivity | What is OM? Why study OM? What Operations Managers Do? Heritage of OM, New trends in OM, The Productivity Challenge, Ethics and Social Responsibility. |
| 2 | 2 | Operations Strategy in a Global Environment | A Global View of Operations, Developing Missions and Strategies, Achieving Competitive Advantage Through Operations, Ten Strategic OM Decisions, Issues in Operations Strategy. |
| 3 | 3 | Project Management | The Importance of Project Management, Project Planning, Project Scheduling, Project Controlling, Project Management Techniques: PERT & CPM, Determine the Project Scheduling, Variability in Activity Times, Cost Time Trade Offs and Project Crashing, A Critique of PERT and CPM. |
| 4 | 4 | Forecasting | What is Forecasting? Types of Forecasts, The Strategic Importance of Forecasting, Seven Steps in the Forecasting System, forecasting Approaches, Times-Series Forecasting, Associative Forecasting Methods: Regression and Correlation Analysis, Monitoring and Controlling Forecasts, Forecasting in the Service Sector.  **QUIZ 1 (10%) End of Week 5** |
| 5 | 6 | Managing Quality | Quality and Strategy, Defining Quality, International Quality Standards, Total Quality Management, Tools of TQM, The Role of Inspection, TQM in Services |
| 5 | 7 | Process Strategy | Four Process Strategies, Process Analysis and Design, Service Process Design, selection of Equipment and Technology, Technology in Services, Process Redesign, Ethics and Environmentally Friendly Processes. |
| 6 | 8 | Location Strategies | The Strategic Importance of Location, Factors That Affect Location Decisions, Methods of Evaluating Location Alternatives, Service Location Strategy. |
| 7 | 9 | Layout Strategies | The Strategic Importance of Layout Decisions, Types of Layout, Office Layout, Retail Layout, Warehousing and Storage Layouts, Fixed-Position Layout, Process-Oriented Layout, Work Cells, Repetitive and Product-Oriented Layout. |
| 8 | **MID TERM EXAMINATION (20 %)** | | |
| 9 | 10 | Human Resources and Job Design | Human Resource Strategy for Competitive Advantage, Labor Planning, Job Design. |
| 9 | 10 | Work Measurement | Labor Standards and Work Measurement, Historical Experience, Time Studies, Predetermined Time Standards, Work Sampling. |
| 10 | 11 | Supply Chain Management | The Supply Chain’s Strategic Importance, Supply Chain Economics, Ethics in the Supply Chain, Managing the Supply Chain, E-Procurement, Vendor Selection, Logistics Management, Measuring Supply Chain Performance. |
| 10 & 11 | 12 | Inventory Management | Functions of Inventory, Inventory Management, Inventory Models, Inventory Models for Independent Demand, Probabilistic Models and Safety Stock, Fixed-Period (P) System. |
| 11 | 13 | Aggregate Planning | The Planning Process, The Nature of Aggregate Planning, Aggregate Planning Strategies, Methods for Aggregate Planning, Aggregate Planning in Services, Yield Management |
| 12 | 14 | Material Requirements Planning (MRP) and ERP | Dependent Demand, Dependent Inventory Model Requirements, MRP Structure, MRP Management, Lot-Sizing Techniques, Extensions of MRP, MRP in Services, Enterprise Resource Planning. |
| 13 & 14 | 15 | Short-Term Scheduling | The Strategic Importance of Short-Term Scheduling, Scheduling Issues, Scheduling Process-Focussed Facilities, Loading Jobs, Sequencing Jobs, Finite Capacity Scheduling, Theory of Constraints, Scheduling Repetitive Facilities, Scheduling Services.  **QUIZ 2 (10 %) End of week 13** |
| 14 | 16 | JIT and Lean Operations | Just-in-Time, the Toyota Production System and Lean Operations, JIT-in-Time, JIT Layout, JIT Inventory, JIT Scheduling, JIT Quality, Lean Operations, Lean Operations in Services |
| 15 | 17 | Maintenance and Reliability | The Strategic Importance of Maintenance and Reliability, Reliability, Maintenance, Total Productive Maintenance, Techniques for Enhancing Maintenance. |
| 16 | **FINAL EXAMINATION (40 % )** | | |

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| **Jubail University College Policies** | |
| **Attendance** | 1. Attending at punctual time: Present otherwise the student is absent.  2. Late attendance 0 − < 5 minutes: is late  3. Late ≥ 5 minutes: is absent  Notes:   1. Every 3 late are counted as 1 absent 2. Every × total semester contact hours + 1 is DN |
| **Grading** | 1. Quality point: is the result of multiplying the credit hours by the grading points. 2. Semester GPA: is the result of dividing total quality points achieved in all courses at that semester by total graded credit hours of all courses in that semester. 3. Cumulative GPA in a semester: is the sum of total quality points achieved in all courses up to that semester divided by the total credit hours graded for all courses up to that semester |
| **Plagiarism & Cheating** | 1. Cheating is a serious offence and will be punished by the JUC.  2. Talking, looking at your colleagues’ exam papers or any other suspicious act is considered cheating during exam.  3. Student will fail the subject if caught cheating. |