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**College of business administration**

**King saud university-al Muzahimiyah branch**

**Course Specification: operations management**

**(MGAT-271)**

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| **Subject Coordinator:** Dr. Showkat Gani | | | |
| **Instructor:** | Dr. Showkat Gani  Dr. Javed Ghaffar | **Instructor title:** | Asstt. Professor |
| **Office:** | F 90, F 94 | **Phone:** | 1157; |
| **Teaching Hours:** | 45 | **E-mail:** | Javed\_ghaffar@rediffmail.com |

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| **Topics** | **Credit hrs.** | **No. of Weeks** |
| 1. **Operations management system**  * What is Operations and Supply Management? * Why Study Operations Management? * Transformation Processes Defined * Differences between Services and Goods * The Importance of Operations Management * Historical Development of OM * Current Issues in OM | **3** | **1** |
| **2.Operations strategy:**   * Operations and Supply Strategy * Competitive Dimensions * Order Qualifiers and Winners * Strategy Design Process * A Framework for Manufacturing Strategy * Service Strategy Capacity Capabilities * Productivity Measures | **3** | **1** |
| **3. Project Management**   * Definition of Project Management * Work Breakdown Structure * Structuring Projects * Critical Path Scheduling | **6** | **2** |
| **4. Product and Service Design**   * Product Development Process * Economic Analysis of Development Projects * Designing for the Customer * Design for Manufacturability * Measuring Product Development Performance | **6** | **2** |
| **5. Strategic Capacity Management**   * Strategic Capacity Planning Defined * Capacity Utilization & Best Operating Level * Economies & Diseconomies of Scale * Capacity Focus, Flexibility & Planning * Determining Capacity Requirements * Capacity Utilization & Service Quality | **3** | **1** |
| **6. Processes analysis**   * Process Analysis * Process Flowcharting * Types of Processes * Process Performance Metrics | **3** | **1** |
| **7. Job Design and Work Measurement**   * Job Design Defined * Job Design Decisions * Trends in Job Design * Work Measurement | **3** | **1** |
| **8. Manufacturing Processes**   * Project layout * Work center * Manufacturing cell * Assembly Line * Continuous process | **3** | **1** |
| **9. Facility layout**   * Facility Layout and Basic Formats * Process Layout * Layout Planning * Assembly Line balancing * Service Layout | **3** | **1** |
| **10. Service Processes**   * Service Strategy: Focus & Advantage * Service-System Design Matrix * Service Blueprinting * Service Fail-safing * Characteristics of a Well-Designed Service Delivery System | **3** | **1** |
| **11. Logistics and Facility Location**   * Know what a third-party logistics provider is * Understand the major issues that need to be considered when locating a plant or warehouse facility * Be able to use the transportation method of linear programming to analyze location problems * Know how a factor rating system can be used to narrow potential location sites * Understand the centroid method to locating entities such as cell phone communication towers | **3** | **1** |
| **12. Inventory Control**   * Inventory System Defined * Inventory Costs * Independent vs. Dependent Demand * Single-Period Inventory Model * Multi-Period Inventory Models: Basic Fixed-Order Quantity Models * Multi-Period Inventory Models: BasicFixed-Time Period Model * Miscellaneous Systems and Issues | **3** | **1** |
| **13. Operations detailed scheduling**   * Work Center Defined * Typical Scheduling and Control Functions * Job-shop Scheduling * Examples of Scheduling Rules * Shop-floor Control * Principles of Work Center Scheduling * Issues in Scheduling Service Personnel | **3** | **1** |

**Distribution of Marks:**

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| **S. No.** | **Examinations** | **Marks** |
| 1. | First Mid-Term Exams | 20 |
| 2. | Second Mid-Term Exams | 20 |
| 3. | Attendance, Participation and Homework | 20 |
| 4. | Final Exam | 40 |
|  | **Total** | **100** |