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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 GaniDr. 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** |