

Course Outline

Course Code: MGT 312

Course Title: Operations Management

Credit Value: 03

Total Marks: 100

Course Textbooks & References

1. Krajewski, L. J., & Ritzman, L. P. (2005). *Operations management: Strategy and analysis* (7th ed.). Pearson Education.
2. Stevenson, W. J. (2021). *Operations management* (14th ed.). McGraw-Hill Education.
3. Chase, R. B., Jacobs, F. R., & Aquilano, N. J. (2006). *Operations management for competitive advantage* (11th ed.). McGraw-Hill/Irwin.

Note: Students are encouraged to consult additional relevant books and online academic resources to enhance their understanding of the course topics.

Detailed Course Outline (28 Classes)

Class No.	Topic	Contents	Reference Book
1	Introduction to Operations Management	Definition, functions, and transformation process of operations management; historical development; importance of operations management.	Book 1 & Book 2 & Book 3
2	Nature and Scope of Operations Management	Difference between manufacturing and service operations; trends and modern views of operations management; operations management practices in Bangladesh manufacturing and service sectors.	
3	Operations Strategy	Operations strategy, functional strategy, business strategy and corporate strategy; relationship among strategies.	Lee Krajewski (pp.47-54); Stevenson (pp.167, 316, 440)
4	Competitive Strategy and Service Strategy	Market analysis, competitive priorities, service strategy and mass customization.	Book 1 & Book 2 & 3
5	Product Design and Planning	Product planning, product development process and strategic importance of product design.	Stevenson (pp.134-143)
6	Competitive Priorities and Positioning	Cost, quality, flexibility, delivery and innovation priorities; time-based competition and positioning strategies.	Stevenson & Other Sources
7	Process Design	Concept of process design, types of processes and factors affecting process selection.	Krajewski & Ritzman (pp.151-170); Stevenson (pp.236-244)

8	Process Analysis and Workforce Management	Process analysis, process improvement, workforce considerations and productivity improvement.	Lee Krajewski
9	Work Measurement	Work standards, methods of work measurement, time study and performance measurement.	Krajewski & Ritzman (pp.467-491); Stevenson (pp.288-305)
10	Learning Curves and Work Improvement	Learning curve concept, managerial considerations and improvement techniques.	Lee Krajewski
11	Capacity Decisions	Capacity measurement, capacity planning, economies of scale and capacity strategy.	Stevenson (pp.185-194)
12	Capacity Planning Applications	Focused facilities and systematic approaches to capacity planning; <i>capacity planning examples from Bangladeshi industries.</i>	Other Sources
13	Operations Planning	Aggregate planning, resource planning and forecasting.	Krajewski & Ritzman (pp.575-583)
14	Scheduling and Lean Operations	Scheduling techniques, lean system, waste reduction and continuous improvement.	Book 1 & Book 2
15	Supply Chain Management	Supply chain concepts, coordination, logistics, and operations planning.	Other Sources
16	Linear Programming Applications	Introduction to optimization approach and application in operations decisions.	
17	Location Analysis	Factors affecting location decisions, single facility location and network facility location.	Krajewski & Ritzman (pp.421-427); Stevenson (pp.336-351)
18	Global Operations Management	Globalization of operations, international production decisions and location challenges.	Stevenson
19	Layout Analysis	Layout planning, strategic issues and types of layouts.	Krajewski & Ritzman (pp.313-329)
20	Process and Product Layout	Designing process layouts, warehouse layouts, office layouts and product layouts.	Lee Krajewski
21	Inventory Management	Meaning, scope, importance and limitations of inventory management.	Krajewski & Ritzman (pp.467-491); Stevenson (pp.546-581)
22	Inventory Control Systems	Inventory management process, stock control systems, inventory replenishment and EOQ concepts.	Book 1 & Book 2 & 3
23	Inventory Counting and Traceability	Inventory count, return management and traceability; inventory challenges in Bangladesh retail and manufacturing sectors.	Book 2

24	Modern Operations Practices	Industry 4.0, automation, digital operations, sustainable operations and green supply chain management.	Others
25	Operations Management Case Analysis	Analysis of manufacturing/service operations cases; operational problems and improvement strategies.	All Books
26	Industry Visit / Field Study Discussion	Industry visit observation, operational practices, production systems, and report discussion.	Practical Learning
27	Student Presentation / Video Presentation	Group presentations or video presentations on operations management topics and industry cases.	All Books
28	Revision and Course Review	Complete syllabus review, discussion, feedback and preparation for final examination.	

Assessment Components

- † **Midterm Examination:** Mid-term examination will cover 3/4 selected chapters according to course progress. Chapter selection and examination schedule may be adjusted based on students' recommendations.
- † **Case Study/Viva:** Students will analyze real operational problems of manufacturing or service organizations and participate in viva discussions.
- † **Assignment:** Individual assignments on operations strategy, process design, capacity planning, inventory management, or related topics.
- † **Term Paper:** Group-based report on selected operations management issues with active participation of all group members.
- † **Presentation:** Group presentation on operations management practices, industry cases, or improvement strategies.
- † **Industry Visit:** Visit to a **manufacturing/service organization** to observe production systems, process management, quality practices, and operational decision-making.

Note: The course contents and chapter distribution ***may be revised according to emerging issues, current scenarios, and students' feedback.*** Students' preferences will be considered and prioritized in deciding midterm examination **dates, selected chapters, term paper topics,** and group presentation **themes.**

Prepared by

Aleya Akter, Lecturer & Course Teacher

Department of Management Studies, Comilla University, Cumilla.