

Subject Code	:	LGT3105	
Subject Title	:	Operations Management	
Level	:	3	
Credits	:	3	
Mode of Study	:	Lectures	28 hours
		Seminars	14 hours
Pre-requisites	:	None	
Assessment	:	Coursework	50%
		Final Examination	50%
Minimum Pass Grade	:	Coursework	(D)
		Final Examination	(D)

ROLE AND PURPOSE

This is a foundation subject designed to help management students understand the principles, concepts and techniques involved in the management of operations in both the manufacturing and service industries. The concepts and techniques acquired will enable students to identify and analyze the value creation process in achieving the organization objectives of satisfying customers at the minimum cost so as to maximize the company profits. The subject will also contribute to the development of students' global outlook, critical thinking and analytical skills, problem-solving, communication and teamwork.

LEARNING OUTCOMES

On successfully completing this subject, students will be able to:

- Have a full understanding of the principles, concepts and techniques in operations management.
- Understand the basic technical and analytical skills for solving operations problems.
- Relate the operations function to overall organizational objectives and other business functions, so as to improve the organizational performance.

INDICATIVE CONTENT

Introduction

Operations function. Relationship with other business functions. Managerial roles and skills in the operations function. Overview of operations strategy. Analyzing the process. Types of processes. Process choice.

Forecasting

Subjective forecasting methods. Quantitative forecasting methods. Time series smoothing. Time series decomposition. Causal models. Monitoring and controlling forecasts.

Designing Operations Systems

Location of facilities. Location decisions. Location factors. Location evaluation methods. Layout of facilities. Managing the workforce. Job design. Work measurement. Compensation.

Capacity Planning

Business planning. Capacity expansion. Aggregate planning. Master production schedule.

Scheduling and Control

Scheduling and control of processes. Sequencing. Loading. Scheduling and controlling projects. Scheduling of services. Just-In-Time manufacturing.

Managing Materials

Inventory control. Managing independent and dependent demand inventory. Materials requirements planning. Capacity requirements planning.

Managing Quality

Quality characteristics. Quality control. Quality assurance. Total quality management. Quality costs. Statistical quality control. Quality circles.

TEACHING/LEARNING APPROACH

Lectures are designed to provide a basic grounding in principles, concepts and techniques in operations management, and to provide a basis for further analysis and application in business organisations.

Seminars provide the environment and means for student-centered learning, in the form of class discussions, case analyses, group and individual work, designed to stimulate original and creative thinking, and the capacity to apply the tools and techniques to the solution of operations problems.

INDICATIVE READING

Davis, M.M., N.J. Aquilano and R.B. Chase, *Fundamentals of Operations Management*, 4th Edition, McGraw-Hill/Irwin, 2003.

Krajewski, L.J. and L.P. Ritzman, *Operations Management: Strategy and Analysis*, 5th Edition, Addison Wesley, 1999.

Chase, R.B. and N.J. Aquilano, *Production and Operations Management: Manufacturing and Services*, 8th Edition, Irwin/McGraw-Hill, 1998.

Dilworth, J.B., *Operations Management*, 2nd Edition, McGraw-Hill, 1996.

Schroeder, R.G., *Operations Management: Decision Making in the Operations Function*, 4th Edition, McGraw-Hill, 1993.

Murdick, R.G., B. Render, and R.S. Russell, *Service Operations Management*, Allyn and Bacon, 1990.

STAFF RESPONSIBLE

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