

COURSE OUTLINE

OPERATIONS MANAGEMENT

Course Title: Operations Management

Course Code: OM202C

Credits: 3

Total Sessions: 24

Course Instructor: .

Contact Information:

Course Link:

Office:

Office hours:

Course contributes mostly to: **Employability/ Entrepreneurship/ Skill Development/ Value-add**

Course Description

Businesses create value by supplying their products or services to satisfy customer demand that involves numerous activities and processes across the organization. Operations managers deal with a major issue in any business - how work gets done: setting up processes, uncovering the biggest bottlenecks, fine-tuning processes to save time and money, managing resources for smooth production of value. Since POM balances costs with revenue to achieve higher operating profits, it is in a constant quest to find 'what is the most efficient, cost-effective way to deliver goods and services. Operations constitute the core functions of adding value to a set of inputs, that make them usable by the consumers (wheat flour to bread, for example), at a certain cost. Conceptually, the field of OM may be broadly divided into two parts: design of operating systems, and their use for generation of surplus. Yet another major classification is based around manufacturing systems and services operations.

This core course introduces Operations function in an organization, helping you understand how managers design, use, manage and improve systems and processes to create value to their customers effectively and efficiently. The subsequent terms offer electives in various verticals in the area – Process Management, Logistics and supply chain management, Project Management, Manufacturing systems, Quality Management, Services Operations, etc., each being a 3- credit course.

Course Objectives

This course introduces major concepts and tools used in the design and use of operations systems in organizations. It introduces the discipline and the role the function plays in a value-creating organization. Emphasis is given both to familiarization of various production processes and service systems, and to quantitative analysis of problems/ issues arising in the management of operations.

Successful completion of the course will empower the students, even if one does not plan to work in Operations, to be able to improve just about any process in any area of the business. At the end of the course, the students will be able to:

1. Appreciate the strategic role of OM in creating and enhancing a firm's competitive advantages
2. Understand key concepts and issues of OM in both manufacturing and service organizations
3. Analyze business processes in services / manufacturing for improvement
4. Identify the operational issues in the value addition processes of a firm
5. Apply analytical skills and problem-solving tools to resolve the operational issues

Alignment of course objectives (CO) with learning goals (LG) of Assurance of Learning

Derived from its mission, ASB has adopted five learning goals, (apart from the discipline competency) - the management-specific attributes, knowledge and skills that its graduates are expected to possess when they complete the programme. OM, taught in T2, reinforces '*Critical and integrative Thinking*' through the critical thinking exercises assigned as homework and discussions followed in the class. The five objectives of this course are mapped to this learning goal. The assessments, written report for the field visit and the writing exercise would reinforce the effective written communication objective of the second learning goal, '*Effective written and oral communication*'.

CO \ LG	Critical and integrative Thinking	Effective written and oral communication	Societal and Environmental Awareness	Ethical Reasoning	Leadership
CO1	3	0	2	2	0
CO2	3	0	0	0	0
CO3	3	1	0	0	0
CO4	3	0	0	0	0
CO5	3	2	2	0	0

Key: 3 – Highly relevant; 2 – Moderately relevant; 1 – Low relevance; 0- No relevance

Unit-wise scope for outcomes and Bloom's taxonomy

The objectives of the course Operations Management is mapped to Bloom's applying, analyzing and evaluating levels of cognitive learning.

CO	CO 1	CO 2	CO 3	CO 4	CO 5
Bloom's Levels of Learning					
Creating			X		X
Evaluating		X	X	X	X
Analyzing		X	X	X	X
Applying	X	X			
Understanding	X				
Remembering					

Pedagogy

The classes will use discussions, problem solving practice and video clippings predominantly, supported with lectures. Every module will have assigned 'take home' exercises to practice critical thinking. The students shall

work in groups on the assigned topic to submit a term/ research paper. This exercise is to give the students an opportunity to identify and use appropriate information and to practice writing skills.

Course Requirements

Throughout this course, the students are expected to demonstrate highest levels of involvement and commitment, in terms of efforts, quality of work, and conduct both at individual level and as groups. The potential of making learning interesting and effective lies primarily in the hands of the students and are expected to use the same for this course throughout the term. The course demands **study efforts of 6 hours/week outside classroom (3 hours for every one session of class). Preparation is mandatory for attending the classes.**

Course Text

Operations Management: Process and Supply Chains, Eleventh Edition, *Lee J. Krajewski, Manoj K. Malhotra, Larry P. Ritzman & Samir K. Srivastava*, Pearson (**may change**)

Assessment (Grading Policy: Relative)

S. no	Assessment exercise	Description	Weight
Group assessment (25%)			
1	Writing exercise	<i>A short term paper on a given topic is submitted in the given template based on information compiled from secondary research</i>	10%
2	Fieldwork report	<i>Each group identifies an organization involved in productive value creation and observes their processes in person. The learning is compiled into a poster which will be presented / displayed.</i>	10%
Individual Assessment (75%)			
1	Attendance	<i>As per the rules</i>	5%
2	Glossary preparation & Quiz from Glossary	<i>Each group prepares a glossary of terms from the assigned module with a minimum of 25 terms. The group members will take a quiz individually on the terms that they have compiled</i>	5%
3	Class preparation – Participation in discussions	<i>Students are assigned class preparation work for each module; They bring with them to the class 3 questions from the assigned work, for which they look for answers in the session</i>	10%
4	Mid-term examination	<i>A closed book exam with emphasis on the understanding and application of concepts</i>	20%
5	End-term examination	<i>A closed book comprehensive exam with emphasis on analyzing, evaluating and critiquing</i>	40%

Contribution to Placements

The knowledge, readings, exercises and assignments for the course make explicit contributions to success during the placement process.

- Field work report: Resume, Interview (*for written communication practice*)
- Glossary of technical terms: Interview, Group Discussion (*for Domain knowledge ready reference*)

- Critical thinking Q & A : Group Discussion, Interview (*as critical thinking practice*)
- Modules mind maps: Group Discussion, Interview (*as a structured thinking tool*)
- Entry level operations positions and JD for these positions mapped with course objectives and discussed

Session Plan

SN NO	TOPIC	CLASS PREPARATION	POST-CLASS READING
Module 1: How does Operations create Value in a business?			Chapter
1	Introduction to Operations Management; Process view & Supply chain view		
2	Operations Strategy Competitive priorities and capabilities		Module map
Writing exercise: Challenges and trends in OM			
Module 2: How are processes chosen for firms strategically?			Chapter
3	Process structure in services & manufacturing : Strategic fit		
4	Process tools		
5	Strategies for change: Process improvement		Module map
Writing exercise: Mass customization practices			
Module 3: How to find what size is the right size?			Chapter
6	Long-term capacity		
7	Systematic approach to long-term capacity		
8	Strategic capacity planning		Module map
Writing exercise: Capacity planning challenges in a service business			
Mid- course Feedback			
Module 4: What limits the system from reaching its goal and how to remove it?			Chapter
9	Bottleneck management		
10	Theory of constraints		
11	Line balancing		Module map
Writing exercise: Bottleneck identification and management in Indian Government hospitals			
Module 5: How to understand and measure quality?			Chapter
12	Cost of Quality; TQM and Six Sigma		
13	SPC and Process capability		
14	Lean Systems		Module map
Writing exercise:			

<i>Module 6: How to know much material to stock?</i>			Chapter
15	Inventory Management basics		
16	ABC analysis; EOQ model and variants		
17	Continuous review system; Periodic Review System		Module map
<i>Writing exercise:</i>			
<i>Module 7: How to know how many to produce?</i>			Chapter
18	Operations Planning and Scheduling: Levels in operations planning, Strategy		
19	Resource Planning: Material requirement planning		
20	Master production scheduling		Module map
<i>Writing exercise:</i>			
<i>Module 8: How to network for creating and delivering value for customers?</i>			Chapter
21	Supply chains- manufacturing & Services; Designing Supply Chains;		
22	Measuring SC performance		
23	Supply chain strategies		Module map
<i>Writing exercise: Well designed Supply chain – An illustration</i>			
24	Course Review and Feedback		
Course Wrap-up			