

**POST GRADUATE DIPLOMA IN MANAGEMENT (PGDM)**  
**OPERATIONS MANAGEMENT – I (OM501)**  
**CREDIT: 2 CREDITS SESSION**  
**DURATION: 60 MINUTES**

**TERM: II**  
**ACADEMIC YEAR: 2021-2022**  
**BATCH: PGDM (2021-2023)**

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**Course Introduction:** Operations Management helps you to understand the role of OM in a firm and to develop abilities to structure and solve operations related problems. The course will empower you with skills to address important aspects of business operations including capacity, productivity, and profitability. You will understand how operations in an organization are configured and factors that can potentially drive the complexity of managing such operations. You will also be able to expand your knowledge of operations management principles and practices which influence business decisions.

**Learning Outcomes:**

- L01:** To make the students aware of the role of Operations in an organization, key components of Operations Management systems, and the nature of interactions among them.
- L02:** To develop an understanding of the applications of Operations Management concepts in strategic decision making.
- L03:** To develop analytical capabilities in the students by equipping them with concepts, tools, and techniques required in managing operations.
- L04:** To develop an understanding of concepts of product design, process selection, location planning, layout planning, etc.
- L05:** To introduce and define the relevance of capacity planning and process analysis in organizations.
- L06:** To develop the understanding of the role and importance of designing an appropriate forecasting system in an organization & different models used for forecasting.

## Pedagogy

Pedagogy would be a combination of lectures, case studies, and problem-solving. Lecture classes shall be discussion-based, and students are expected to read the relevant chapters from the book and any other reading material provided before they come to the class. Case studies will be discussed which will help in understanding Operations Management in actual work situations. The course will be taught as per the session plan given in this document. *Students are expected to participate in class discussions.*

## Evaluation criteria

Evaluation Components	Learning Outcomes	Weightage (%)
Quiz	LO - 1, 2, 3, 4, 5, 6	20%
Mid Term	LO - 1, 2, 3	30%
Group Presentation	LO - 1, 2, 3, 4, 5,6	20%
End-Term	LO - 1, 2, 3, 4, 5, 6	30%
<b>Total</b>		<b>100%</b>

## Textbooks

- B Mahadevan, Operations Management, Theory and Practice. Pearson Education, Third Edition.

## Reference books

- Chase R B, Shankar Ravi, Aquilano N J, and Jacobs F R, "Operations and Supply Management", Tata McGraw Hill Education Limited, 12th edition.
- Siddharth S Padhi, Operations Management. Text and Cases. Star Business Series. Staredu Solutions. (Book 2)

## Academic integrity

We are committed to upholding the highest standards of academic integrity and honesty. Plagiarism is the use of or presentation of ideas, works that are not one's own and which are not common knowledge, without granting credit to the originator. You may refer the already available content just for your reference and to get the basic ideas. Only 20% of such content is acceptable, above that comes under the definition of Plagiarism which is unacceptable in IMI and will be treated seriously. All such cases will be referred to the appropriate body of the Institute for suitable disciplinary action.

## Session Plan

Session No.	Topic	Learning Outcomes	Reading
1- 2	<b>Introduction to Operations Management</b> <ul style="list-style-type: none"> <li>❖ Definition and scope</li> <li>❖ Concept of production</li> <li>❖ Classification of production systems</li> <li>❖ Manufacturing vs. services</li> </ul>	LO - 1 LO - 2 LO - 3	<b>Textbook:</b> Chapter 1
3	<ul style="list-style-type: none"> <li>❖ Case study discussion</li> </ul>	LO - 1 LO - 2	<b>Case:</b> <i>“Narayana Health: A journey that began with wining the heart of India.</i>
4-5	<b>Operations Strategy</b> <ul style="list-style-type: none"> <li>❖ Relevance of Operations</li> <li>❖ Strategy formulation process</li> <li>❖ Measures of Operational Excellence</li> <li>❖ Emerging Context for Operations Strategy</li> </ul>	LO - 1 LO - 2 LO - 3 LO - 4	<b>Textbook:</b> Chapter 2
6-7	<b>Sustainability in Operations</b> <ul style="list-style-type: none"> <li>❖ Sustainability -A key business requirement</li> <li>❖ Framework for sustainable operations management</li> <li>❖ Design for sustainability</li> <li>❖ Reverse Logistics &amp; Remanufacturing</li> </ul>	LO - 1 LO - 3 LO - 4 LO - 5	<b>Textbook:</b> Chapter 3
8	<ul style="list-style-type: none"> <li>❖ Case study discussion</li> </ul>	LO - 1 LO - 2 LO - 3	<b>Article:</b> Bahinipati, B. K., & Panigrahi, S. S. (2018). A framework for sustainable supply chains: evaluation of implementation barriers. <i>International Journal of Intelligent Enterprise</i> , 5(3), 231-265

Session No.	Topic	Learning Outcomes	Reading
9-10	<b>Location Planning</b> <ul style="list-style-type: none"> <li>❖ Factors affecting location decisions</li> <li>❖ Techniques for deciding on facility location: Weighted Score Model, Load distance method, Center of gravity method, Break-even analysis</li> </ul>	LO - 1 LO - 2 LO - 4	<b>Textbook:</b> Chapter 6
11	<ul style="list-style-type: none"> <li>❖ Case Study Discussion</li> </ul>	LO - 1 LO - 2 LO - 3 LO - 4	<b>Case:</b> Special Economic Zones: A policy angle to location planning
12-14	<b>Process and Capacity Analysis</b> <ul style="list-style-type: none"> <li>❖ Planning premises and process implications</li> <li>❖ Analysing process</li> <li>❖ Measures of Capacity</li> <li>❖ Capacity Planning framework</li> </ul>	LO - 1 LO - 2 LO - 4	<b>Textbook:</b> Chapter 9
15-16	<b>Facility layout</b> <ul style="list-style-type: none"> <li>❖ Types of facility layouts: Process layout, Product layout, Cellular layout, Project layout, Design of layouts</li> </ul>	LO - 1 LO - 2 LO - 4	<b>Textbook:</b> Chapter 9
17-18	<b>Work Study and Work</b> <ul style="list-style-type: none"> <li>❖ Measurement Importance of Work Study</li> <li>❖ Motion Study</li> </ul>	LO - 1 LO - 2 LO - 3 LO - 5	<b>Reference Book 2</b> Chapter 5
19-20	<b>Industry 4.0 and Operations Management</b> <ul style="list-style-type: none"> <li>❖ Evolution of industrial revolutions</li> <li>❖ Components of Industry 4.0</li> </ul>	LO - 1 LO - 2 LO - 3 LO - 6	<b>Reading Material:</b> <ul style="list-style-type: none"> <li>❖ Olsen, T. L., &amp; Tomlin, B. (2020). Industry 4.0: Opportunities and challenges for operations management. <i>Manufacturing &amp; Service Operations Management</i>, 22(1), 113-122.</li> </ul>

