



**INTERNATIONAL MANAGEMENT INSTITUTE, BHUBANESWAR**  
**POST GRADUATE DIPLOMA IN MANAGEMENT (PGDM)**  
**OPERATIONS MANAGEMENT – I (OM502)**  
**CREDIT: 2 CREDITS**  
**SESSION DURATION: 60 MINUTES**

**TERM: II**  
**ACADEMIC YEAR: 2020-2021**  
**BATCH: PGDM (2020-2022)**

**Faculty:** Prof. Swayam S Panigrahi & Prof. Ritu Singh

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**Office hours:** 9:30 a.m. – 5:30 p.m.

**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 (%)
Class Participation (Including Case Discussions and assignments)	LO - 1, 2, 3, 4, 5, 6	20%
Quiz (2)	LO - 1, 2, 3	20%
Group Presentation	LO - 1, 2, 3	20%
End-Term	LO - 1, 2, 3, 4, 5, 6	40%
<b>Total</b>		<b>100%</b>

Quiz 1 and 2 will be held after 9 and 18 sessions, respectively.

## Textbooks

- Chase R B, Shankar Ravi, Aquilano N J, and Jacobs F R, "Operations and Supply Management", Tata McGraw Hill Education Limited, 12<sup>th</sup> edition.
- Ashwathapa and Bhat, Production and Operations Management, Himalaya Publishing House. 2010.
- B Mahadevan, Operations Management, Theory and Practice. Pearson Education, Third Edition.

## 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>❖ Evolution of Operations Management</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 Chase, Shankar and Jacobs, "Operations and Supply chain management", 14e, pg 2-27
3	<ul style="list-style-type: none"> <li>❖ Case study discussion</li> </ul>	LO – 1 LO – 2	<b>Case:</b> "Narayana Health: an innovative healthcare system in India"
4-5	<b>Product design and development</b> <ul style="list-style-type: none"> <li>❖ Product life cycle</li> <li>❖ Product development process</li> <li>❖ Concurrent engineering</li> <li>❖ Reliability</li> <li>❖ Designing for Manufacturability</li> </ul>	LO – 1 LO – 2 LO – 3 LO – 4	<b>Textbook:</b> Chapter 4 Chase R B, Shankar Ravi, Aquilano N J, and Jacobs F R, "Operations and Supply Management", Pg: 107-122
5-6	<b>Process management</b> <ul style="list-style-type: none"> <li>❖ Process design</li> <li>❖ Framework of Process design</li> <li>❖ Process Selection</li> <li>❖ Process Improvement</li> </ul>	LO – 1 LO – 3 LO – 4 LO – 5	<b>Textbook:</b> Chapter 5 Aswathappa and Bhat, "Productions and Operations Management", Himalaya Publishing House, 2010, Pg: 64-65; 68-70
7	<ul style="list-style-type: none"> <li>❖ Case study discussion</li> </ul>	LO – 1 LO – 2 LO – 3	<b>Article:</b> Khanna, V.K. and Shankar, R. (2008), "Journey to implement Toyota production system – a case study", <i>Journal of Advances in Management Research</i> , Vol. 5 No. 1, pp. 80-88.

Session No.	Topic	Learning Outcomes	Reading
8-9	<b>Facility location</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 8 Aswathappa and Bhat, "Productions and Operations Management", Himalaya Publishing House, 2010, Pg: 117-138
10	<ul style="list-style-type: none"> <li>❖ Case Study Discussion</li> </ul>	LO - 1 LO - 2 LO - 3 LO - 4	<b>Case:</b> <i>Ginger Hotels</i>
11-12	<b>Facility layout</b> <ul style="list-style-type: none"> <li>❖ Types of facility layouts: Process layout, Product layout, Cellular layout, Project layout</li> <li>❖ Design of layouts</li> </ul>	LO - 1 LO - 2 LO - 4	<b>Textbook:</b> Chapter 7a Chase R B, Shankar Ravi, Aquilano N J, and Jacobs F R, "Operations and Supply Management", Pg: 262-282
13-14	<b>Capacity Planning</b> <ul style="list-style-type: none"> <li>❖ Importance of capacity decisions</li> <li>❖ Types of capacities</li> <li>❖ Measuring capacity</li> <li>❖ Economies of scale and Learning Curve</li> </ul> Determining capacity requirements	LO - 1 LO - 2 LO - 3 LO - 5	<b>Textbook:</b> Chapter 5 Chase R B, Shankar Ravi, Aquilano N J, and Jacobs F R, "Operations and Supply Management", Pg: 143-160
15-16	<ul style="list-style-type: none"> <li>❖ Case study discussion</li> </ul>	LO - 1 LO - 2 LO - 3	<b>Case:</b> <i>Scharffen Berger Chocolate Maker</i>
17-18	<b>Forecasting</b> <ul style="list-style-type: none"> <li>❖ Types of Forecasting</li> <li>❖ Qualitative and Quantitative Forecasting methods</li> <li>❖ Time Series Analysis</li> <li>❖ Exponential smoothing</li> </ul>	LO - 1 LO - 2 LO - 3 LO - 6	<b>Textbook:</b> Chapter 15 Chase R B, Shankar Ravi, Aquilano N J, and Jacobs F R, "Operations and Supply Management", Pg: 550-580

Session No.	Topic	Learning Outcomes	Reading
19	❖ Case study discussion	LO – 1 LO – 2 LO – 3 LO – 6	<b>Article:</b> Fildes, R., Goodwin, P., Lawrence, M., & Nikolopoulos, K. (2009). <i>Effective forecasting and judgmental adjustments: an empirical evaluation and strategies for improvement in supply-chain planning</i> . International journal of forecasting, 25(1), 3-23.
20	<b>'The Goal'</b> book discussion	LO – 1 LO – 2 LO – 3	<b>Book:</b> Cox, J., & Goldratt, E. M. (1993). <i>The goal: a process of ongoing improvement</i> .
21-22	Group Presentations		

Session 1-10: **Prof. Swayam**

Session 11-20: **Prof. Ritu**