

INTERNATIONAL MANAGEMENT INSTITUTE, BHUBANESWAR Post Graduate  
Diploma in Management (PGDM)  
Operations Management I (OM501) CREDIT: Full (three credits) SESSION DURATION:  
90 Minutes

TERM: II YEAR:  
2016-2018  
BATCH: I

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Office hours: 9.30 AM – 5.30 PM

**Course Introduction:** This course will help the students to understand the basics of operations management (OM) and the role of OM in the execution of a firm's operations. It will also enable the students to develop abilities such as: understand, analyze and solve operations related real world problems. The students will be exposed to various facets of operations management – operations strategy, capacity planning, productivity improvement, quality, demand forecasting, project management, manufacturing and supply chain. The course is aimed at equipping the students with the proper tools, techniques and skills to estimate, compute, analyze and configure key elements of operations management.

**Course Objectives:**

- a) To make the students aware of the role of Operations Management in business organizations.
- b) To develop an understanding of the applications of Operations Management concepts in strategic decision making.
- c) To develop analytic capabilities in the students by equipping them with concepts, tools and techniques required in managing operations.

**Learning Outcomes:**

At the end of the course the students should be able to:

1. Understand the importance of Operations Management in organizations.
2. Relate Operations Management with strategic decision making in a firm.
3. Apply theoretical concepts to real life situations

**Course 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 the class discussions.

**Course Readings:**

**Text book**

• Chase, Richard B., Shankar, Ravi and Jacobs, Robert F. Operations and Supply Chain Management, 14<sup>th</sup> edition. Mc Graw Hill Education.

**Reference book(s)**

Mahadevan, B. Operations Management: Theory and Practice (2<sup>nd</sup> edition). Pearson.

**Course Evaluation criteria**

<b>Component</b>	<b>Weight</b>
Class Participation + Quiz	20%
Case Analysis and Presentation	20%
Mid-Term	30%
End-term	30%
Total	100%

**Session Plan**

<b>Session No./s</b>	<b>Topic &amp; Reading/s</b>	<b>Course Outcome</b>
1-3	<p>Introduction to Operations Management and Operations Strategy</p> <ul style="list-style-type: none"> <li>· Definition and scope</li> <li>· Goods vs. services systems</li> <li>· Efficiency, effectiveness and value</li> <li>· Components of Operations strategy</li> <li>· Competitive priorities</li> <li>· Trade-offs, order winner, order qualifier</li> </ul> <p><b>Readings:</b> Book Chapter: 1, 2</p> <p>Case Study: · Mc Donald's Corporation (693-028) – David Upton OPERATIONS STRATEGY AT GALANZ - Stephen (Chi Hung) Ng; Barbara Li; Xiande Zhao; Xuejun Xu; Yang Le</p>	1, 2
4-6	<p>Process management</p> <ul style="list-style-type: none"> <li>· Manufacturing Process – classification, organization, product-process matrix</li> <li>· Manufacturing process analysis, break-even analysis.</li> <li>· Service Process – classification, evaluation, service package, variability.</li> <li>· Waiting line analysis</li> </ul> <p><b>Readings:</b> Book Chapter: 7, 9 and 10</p> <p>Case Study: Benihana of Tokyo - W. Earl Sasser Jr.; John R. Klug</p>	2, 3
7-8	<p>Process Design and Analysis</p> <ul style="list-style-type: none"> <li>· Flowtime</li> <li>· Throughput rate</li> <li>· Little's law</li> <li>· Utilization</li> <li>· Bottle-neck</li> </ul> <p><b>Readings:</b></p>	2, 3

	<p>Book Chapter: 11</p> <p>Case Study: Belle Inc. (UV6976) – Jeremy Hutchinson-Krupat.</p>	
9-10	<p>Facility location</p> <ul style="list-style-type: none"> <li>☒ Factors affecting location decisions</li> <li>☒ Techniques for deciding on facility location: Centroid method, Gravity model, Regression etc.</li> </ul> <p><b>Readings:</b></p> <p>Book Chapter: 15</p> <p>Case Study:</p> <ul style="list-style-type: none"> <li>☒ Amazon.com’s European Distribution Strategy - Janice H. Hammond; Claire Chiron</li> <li>☒ Polaris Industries Inc. – Sunil Chopra</li> </ul>	2, 3
11-12	<p>Facility layout</p> <ul style="list-style-type: none"> <li>• Types of facility layouts: Project layout, manufacturing cell, work center, assembly line</li> <li>• Design of layouts</li> <li>• Assembly Line Balancing</li> </ul> <p>Readings:</p> <p>Book Chapter: 8</p>	2, 3
13-14	<p>Capacity Planning</p> <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> <li>☒ Determining capacity requirements</li> <li>☒ Decision trees to evaluate capacity alternatives</li> </ul> <p><b>Readings:</b></p> <p>Book Chapter: 5, 6</p> <p>Case Study: GENENTECH--CAPACITY PLANNING - Daniel C. Snow; Steven C. Wheelwright; Alison Berkley Wagonfeld</p>	2, 3
15-16	<p>Forecasting for Operations</p> <p>Types of Forecasting</p> <p>Qualitative and Quantitative Forecasting methods</p> <ul style="list-style-type: none"> <li>☒ Time Series Analysis</li> </ul> <p>Exponential smoothing</p> <p>Readings:</p> <p>Book Chapter: 18</p> <p>Case Study: From the text book / Handouts distributed in the class</p>	2, 3
17-18	<p>Project Management</p> <ul style="list-style-type: none"> <li>• What is Project Management</li> <li>• Work Breakdown Structure</li> <li>• Project S Curves</li> <li>• Network Planning Models</li> </ul> <p><b>Readings:</b></p> <p>Book Chapter: 4</p> <p>Case Study: From the textbook</p>	2, 3

19-20	Case Analysis and presentations	2, 3
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17-18	<p>Project Management</p> <ul style="list-style-type: none"><li>· What is Project Management</li><li>· Work Breakdown Structure</li><li>· Project S Curves</li><li>· Network Planning Models</li></ul> <p>Readings:</p> <p>Book Chapter: 4</p> <p>Case Study: From the textbook</p>
19-20	Case analysis presentations