

<b>Course Title:</b> Production and Operations Management				
<b>Course Code:</b> PPM 187		<b>No. of credits:</b> 3	<b>L-T-P:</b> 38-07-0	<b>Learning hours:</b> 45
<b>Pre-requisite course code and title (if any):</b> NA				
<b>Department:</b> Policy & Management Studies				
<b>Course coordinator:</b> Dr Shruti Sharma Rana			<b>Course Instructor :</b> Guest Faculty	
<b>Contact Details :</b>			<b>Offered in:</b> Semester 2	
<b>Course Type:</b> Core				
<b>Course Description:</b> Any or every organization is a system of operations, whether or not called ‘operations’. Ultimate goal or purpose of such a system being production of goods and/or services and to carry them till the point of time and place of consumption. Therefore operations management involves everything an organization does and hence <b>every manager is an operations manager</b> . Production and Operations Management (POM) focuses on carefully managing the processes to produce and distribute products and services." Conventionally speaking Major, overall activities under POM, include product creation, development, production and distribution. Major functions of POM include Managing purchases, Inventory control, Quality control, Storage, Logistics and Evaluations. Focus will be efficiency and effectiveness of the processes.  The basic premise of Operations may not have changed over the years. However, over the years there has been a significant growth in Services and E-Businesses. Services operations Planning and Scheduling needs special focus.				
<b>Course objectives</b> One of the most critical areas for success in any business enterprise is how Production and Operations are managed. In the ‘Productions and Operations Management’ course an attempt will be made to integrate the courses studied by the students like statistics, economics, finance, organizational behaviour and strategy into a consolidated production and operation related decisions.				
<b>Course Contents</b>				
<b>Module</b>	<b>Topic</b>	<b>L</b>	<b>T</b>	<b>P</b>
1.	Generation of Four key deliverables:  Review of existing Organisation set-up for ‘Production and Operations’. Systems Perspective  Best Practices of Indian and International companies Re-designing the set-up to global standards Support Systems & Policies necessary for such an International set-up. Managing Operations Strategy in a Global Environment, Factors affecting location decisions.	4	0	0
2.	Defining an optimal model for POM Organisational set-up of the entity following a five step approach: Setting Vision & Rationale: Developing Vision: To double size of the entity by Next 5/10 years and further triple by .15/20 years to be within the top three companies in particular product category / taking the best elements from three key areas to build a robust growth strategy	4	0	0

	<p>Forecasting Current POM Themes. Best Fit Extended Themes.</p> <p>set-up and Resources: depending on the vision, business needs Defining Implementation Plan and Support (after having completed development of the PMO set-up as in the following chapters)</p>			
3.	<p>Vision Strategic Direction and Performance Objectives. Design Principles Design of Products and Services (Emerging from managements perspectives for where.1  the POM set-up is and where it should be)</p> <p>Best Practices (Determined above II(2) and shortlisted on the criteria of SWOT for the respective organisation. Building a future operating model for the entity will need to sustain strengths and remove weaknesses.</p> <p>Exiting Portfolio Shape and Direction: To be developed on a specially designed new Pyramidal model.</p> <p>Portfolio Needs, Activity Plans, Workload and commitments: To be synthesised from the business plans of the organisation (5 year plans/10 year plans or strategic intents), by understanding future 1</p> <p>Resource requirements, supported by an activity-driven model.</p>	8	0	0
4.	<p>Core functions and support-functions to be discussed in details: Core Operation 1 : Production Operations Defining operating philosophy Planning production volumes and capacities Analysing Operating facilities Core Operation 2: Maintenance  Developing maintenance planning and strategy Executing maintenance activities Monitoring maintenance performance Support Operation 1: Contracts &amp; Procurement Defining outsourcing philosophy Developing sourcing strategy Selecting suppliers Managing suppliers Reviewing supplier performance Understanding total costs of procurement Support Operation 2: Supply Chain Management Managing supply chain Sustainability in the Supply Chain Managing orders Managing inventory Support Operation 3: Logistics Managing warehouse Managing transport</p>	18	7	0

	Measuring effectiveness and efficiency of the operations. Quality Controls, Statistical Concepts. Just in Time, Lean Operations, Toyota Production System, Agile Methodology			
5.	Case Studies  Strategic Considerations in Internationalization Choice of Markets Entry Options : Rapid / Beachhead  Challenges. Managing Global Competitiveness: Identifying Bottlenecks in POM	4	0	0
	<b>Total (in hours)</b>	<b>38</b>	<b>7</b>	<b>0</b>
<b>Evaluation criteria</b> <ul style="list-style-type: none"> <li>• Minor 1 Exam (Class Participation)- 20%</li> <li>• Minor 2 Exam (Individual assignments on mapping and redesigning different organizations on specific new models introduced in the class and/or pre-announced quizzes/class tests)- 20%</li> <li>• Minor 3 Exam (Presentation)- 20%</li> <li>• Major Exam (Written Exam)- 40%</li> </ul>				
<b>Learning Outcome:</b>  After completing the course the participants shall develop an understanding on how to create a production entity with focus on - <ol style="list-style-type: none"> <li>1. Production Base</li> <li>2. Financial (Cost) Performance</li> <li>3. Technical and Operational capabilities</li> <li>4. Human Capabilities</li> </ol>				
<b>Materials:</b> <ol style="list-style-type: none"> <li>1. B Malakooti (2014), 'Operation and Production System with Multiple Objectives', Wiley</li> <li>2. S N Chary (2013), 'Production and Operation Management', 5th Edition, Tata Mac Graw Hill</li> <li>3. William Stevenson. Operations Management, 12<sup>th</sup> Edition, Mc Graw Hill</li> <li>4. Heizer. Operations Management – Sustainability and Supply Chain Management, 12<sup>th</sup> Edition, Pearson</li> </ol>				
<b>Pedagogical approach</b> <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Illustrative cases and case discussions (groups)</li> <li>• Assignments (Individual / group).</li> </ul>				
<b>Additional information (if any)</b>				
<b>Student responsibilities</b> The students are expected to submit assignments in time and come prepared with readings when provided.				

**Prepared by:** Dr Vinod Kumar Jangid

**Course Reviewers:**

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