		Production Research, Dec2008, Vol. 46 Issue 23 Critical analysis of Six Sigma Implementation by Moosa, Kamran; Sajid, Ali. Total Quality Management & Business Excellence, Jul2010, Vol. 21 Issue 7

Semester	III	Specialization	Supply Chain Management
Course Code	311SCM	Type	Subject - Elective
Course Title	Supply Chain Planning		

Course Objectives:	
1	To understand essentials of Demand Management
2	To get acquainted to Supply Chain Aggregate Planning
3	To understand how to manage predictable variability in Supply Chain
4	To recognize the role of Network Planning and understand basic Network Planning Design Models

Syllabus:

Unit Number	Contents	Number of Sessions
1	**Forecasting:** Concept and definition of Forecasting & Demand, Role of Forecasting in SC, Traditional Forecasting Methods – Judgment Methods, Market Research Methods, Time Series Methods, Causal Methods. Selection of Appropriate Forecasting technique, Risks in Forecasting – forecasting error	5 + 1
2	**Demand Management:** Collaborative Planning, Forecasting & Replenishment (CPFR). Order fulfillment & Order Management. Customer Service Level & Expected cost of stock outs (Numericals Expected)	5 + 1
3	**Aggregate Planning in SC:** Concept of Aggregate Planning & its role in SC. Aggregate Planning Strategies, Aggregate Planning for Services, Aggregate Planning using MS-Excel, Role of IT in Aggregate Planning, Aggregate Planning in Practice	5 +1
4	**Managing Predictable Variability in SC:** Decision Environment of SC – external factors responsible for decisions, Concept of Variability, Responding to predictable variability, Managing Supply, Managing Demand, Impact of seasonality	5 + 1
5	**Network Decisions:** Choices of Network Configurations – direct shipping, distribution through intermediary, customer pick up, Challenges in Network Configuration. Models – Strategic Facility Location Model with Single Capacity Choice, Strategic Facility Location Model with Two Capacity Choices, Demand Allocation Across different Facilities with Fixed Capacities, Gravity Location	5 + 1

	Model, Uncertainty and Application of Probability	

Learning Resources:		
1	Text Books	Supply Chain Management – Strategy, Planning and Execution by Sunil Chopra, Peter Meindl, D V Kalra, Pearson Education, 3rd Edition Supply Chain Management Process, System & Practice by N.Chadrasekaran, Oxford, 1st Edition
2	Reference Books	The Management of Business Logistics: A Supply Chain Perspective by Coyle, Bardi and Langley, Cengage Learning – India 7th Edition.
3	Supplementary Reading Material	Managing the Supply Chain: A Strategic Perspective by Gattorna and Walters, Palgrave. A Logistics Approach to Supply Chain Management by Coyle, Langley, Gibson, Novack, Bardi, Cengage Learning, India Edition, 2009.
4	Websites	http://www.ibf.org/
5	Journals	Mapping the Future of Supply Chain Management: a Delphi study by Melny K, Steven A.; Lummus, Rhonda R.; Vokurka, Robert J.; Burns, Laird J.; Sandor, Joe., International Journal of Production Research, Aug2009, Vol. 47 Issue 16 Aligning Demand Management with Business Strategy by Jim R and Langabeer II, Supply Chain Management Review, May/June 2000. ABC of Collaborative Planning Forecasting and Replenishment by Ireland, Ron., Journal of Business Forecasting, Summer2005, Vol. 24 Issue 2 Collaborative Planning, Forecasting &Replenishment (CPFR): Realizing the Promise of Efficient by Sherman, Richard J., Journal of Marketing Theory & Practice, Fall 98, Vol. 6 Issue 4