

# XAVIER INSTITUTE OF MANAGEMENT, BHUBANESWAR

## Xavier University, Bhubaneshwar

<b>Course</b>	<b>SupplyChain Management</b>
<b>Program</b>	<b>MBA (BM)</b>
<b>Batch</b>	<b>2021-2023</b>
<b>Term</b>	<b>V</b>
<b>Credits</b>	<b>3.0</b>
<b>Instructor(s)</b>	<b>Prof. Arijit Mitra</b>

### 1.0 Course introduction and objectives:

#### 1.1 Course introduction:

Supply Chain Management is about the management of material, fund and information flows in multi-stage procurement, production, and distribution networks. Driven by fierce global competition and enabled by advanced process and information technology, many companies have taken initiatives to reduce costs and at the same time increase responsiveness to stay ahead of the competition in the marketplace. This course intends to provide students with the knowledge and the tools necessary to develop, implement and sustain strategies for managing supply network issues.

#### 1.2 Course objectives:

- Understand the role of supply chain in organization's competitiveness and the key phases in the supply chain.
- Identify the major drivers of supply chain performance.
- Understand, formulate, analyze and solve real world supply chain problems.
- Recognize the risk in managing the supply chain and also appreciate the importance of sustainability while designing supply chains.

### 2.0 Major course content:

- a) Understanding the importance of supply chain
- b) Achieving strategic fit in a supply chain
- c) Supply chain drivers and metrics
- d) Network design in the supply chain
- e) Bull-whip effect
- f) Inventory management and control
- g) Managing economies of scale in a supply chain cycle inventory
- h) Managing uncertainty in a supply chain safety inventory
- i) Transportation in a supply chain
- j) Sourcing decisions in a supply chain
- k) Sustainability and the supply chain

### 3.0 Course learning outcomes (CLO):

- a) **CLO1:** Be able to understand the fundamental concepts of supply chain.
- b) **CLO 2:** Be able to understand and analyze supply chain problems.
- c) **CLO3:** Be able to exhibit voluntary cooperation and teamworking attributes in a group setting to solve supply chain problems jointly and present the findings in the class and submit a soft copy of the report.

### 4.0 Reading and references:

- a) Textbook: Chopra Sunil, Meindl Peter, and Kalra, D, “Supply Chain Management, Strategy, Planning & Operation”, Pearson, 7th Edition.
- b) Reference Books:
  - i) Simchi-Levi David, Kaminsky Philip, Simchi-Levi Edith and Shankar, Ravi, “Designing & Managing the Supply Chain, Concepts, Strategies & case studies”, Tata McGraw Hill, 3rd Edition.
  - ii) Ballou Ronald H, & Srivastava Samir K., “Business Logistics/ Supply Chain Management.”, Pearson, 5th Edition.
  - iii) Handfield, Robert and Bozarth, Cecil., Shah Janat., “Introduction to Operations and Supply Chain Management, Pearson, Text and Cases, Pearson, 3<sup>rd</sup> Edition.

### 5.0 Pedagogy and student’s workload:

The pedagogy will include delivery methods like, lecture, case study, journal articles, quantitative problems, and projects. Students are expected to read the given class materials, solve assignments and solve problems on their own. It is expected that students should spend around 5-6 hrs of time for this subject outside the classroom.

### 6.0 Tentative session plan:

Session	Topic	Session Learnings	Reading Materials
1 - 3	Understanding the Supply Chain  Achieving Strategic Fit in a Supply Chain	Introduces the supply chain, the managerial objective, and key decisions.  Discusses the need to align strategy with supply chain capabilities.	Class discussion and Articles (will be given by the faculty)
4 - 5	Supply Chain Drivers and Metrics	Defines key drivers of supply chain performance and associated performance metrics.	Textbook Chapter 3  Case – Financial Statements for Walmart Stores Inc. and Macy’s Inc. (given in the chapter)
6 - 7	The Bullwhip effect and Coordination in the Supply chain	Discusses obstacles to coordination and managerial levers that help improve coordination in a supply chain.	Article - Mass Customization at HP: The power of postponement

			Textbook Chapter 10 / Article: Bullwhip in Supply chain
8 - 10	Network Design in the Supply Chain	Presents analytic models that support network design.	Textbook Chapter 4,5,6
11 - 14	Managing single period inventory with Newsvendor Problem  Managing Economies of Scale in a Supply Chain – Cycle Inventory  Managing Uncertainty in a Supply Chain – Safety Inventory	Introduces methodologies to obtain optimal batch sizes and discusses managerial levers that help reduce cycle inventory without hurting costs. Introduces methodologies to obtain safety inventory and discusses managerial levers that help reduce safety inventory without hurting product availability	Textbook Chapter 11 & 12  CASE: Delivery Strategy at MoonChem (given in the chapter)
15 - 16	Transportation in a Supply Chain	Discusses options and tradeoffs when designing a transportation network	Textbook Chapter 14  Article will be given by faculty
17	Managing risk in supply chain	Understanding of different risks in handling the supply chain and the frameworks to develop resilience.	Article will be provided by the faculty
18	Digitization in Supply Chain and Sustainability issues in the Supply Chain (Guest Lecture)	Understanding the modern technologies used in the supply chain and the sustainability aspects which are important in the Supply chain management	Materials will be provided by the guest faculty  Textbook Chapter - 17
19 & 20	Group Presentation by Students	Learn about new ideas and best practices of industry.	Selected topics chosen by the groups

## 7.0 Assessment scheme:

Component	Weightage (%)	Assessment of course learning outcome(s) (CLO)
Quizzes (two @ 15% each)	30%	CLO1
End-Term	40%	CLO2
Group project presentation	20%	CLO3
Class attendance and participation	10%	CLO1

## 8.0 Academic discipline and integrity:

- Students are expected to come to class on time.
- Students are expected to join the class with prior preparation and having done assigned pre-readings.
- Students are expected to submit assignments on time.
- Late coming involves the penalty of no attendance, or sometimes barring from the class, if the reason for coming late is found not satisfactory.

- Utmost care will be taken to *maintain class decorum*, *follow* the exact **evaluation norms**, *conduct* fair examinations, fair and transparent evaluation of examination papers, etc.

## 9.0 Mapping course learning outcomes (CLO) with the program learning goals (PLG):

PLG#	Program Learning Goal	Trait	Addressed by Course	
			Yes	No
PLG1	Functional and Business Skills	The students will demonstrate understanding of elements of supply chain management	Yes	
PLG2	Analytical Skills	The students will use analytical techniques to identify a supply chain business problem, and suggest a solution	Yes	
PLG3	Collaboration and teamwork attributes	The students will exhibit voluntary cooperation and effective teamwork in a group setting while working on a group-project.	Yes	
PLG4	Ethical responsibility	The students will understand the ethical complexities of conducting business. The students will adopt techniques in scenarios involving ethical dilemma and offer resolution	Yes	
PLG5	Communication	The students will produce reasonably good quality business document as part of the SCM course requirements. The students will become effective and confident communicators, by presenting their views in the class and making the group presentations.	Yes	