

XAVIER INSTITUTE OF MANAGEMENT, BHUBANESWAR

Xavier University

Course Name	Global Sourcing and Lean Materials Management
Programme	MBA-BM
Batch	2021 - 23
Term	VI
Credits	3.0
Course Instructor	Prof. Arijit Mitra

Course Introduction and Objectives

Across the world, Sourcing, Warehousing and Materials management are some of key aspects of an inbound value chain through which manufacturing companies and their service providers are generating wealth in recent days and so these are key focus areas for the academia, consultants and practitioners working in the field of operations management. This course highlights these three key areas in a well-structured and interconnected way and so, creates real values for the management students, particularly for those who are interested in building their career in supply chain and procurement.

The primary objective of this course is to understand the perspective of Global Sourcing and Strategic Sourcing and to ensure the usage of Strategic Sourcing frameworks in the context of procurement of goods and services. The second objective is to focus on how companies manage their warehousing decisions and day-to-day warehousing operations. Material management (MM) is also an approach for planning, organizing, and controlling all those activities principally concerned with the flow of materials into an organization. Sourcing, warehousing, and MM are equally responsible for plans and designs for the procurement and delivery, distribution, storage, collection, and removal of occupant-generated streams of materials and services. Our third important objective is to understand the fundamentals of MM and to realize how different important components of Operations Management are responsible for forming the function Materials Management. Last but not the least, this course connects MM with advanced and contemporary topic i.e., SAP and Lean Management.

Course Content

The course content needs to point out what will be covered in the course. An example is given below for your reference. In case multiple faculties teach the course, the content needs to be same.

- a) Themes, theories, and frameworks used in sourcing
- b) Buyer-supplier relationship and contract
- c) Mathematical tools and sustainability aspects of sourcing
- d) Warehousing decisions and warehousing operations
- e) Materials management: Inventory analytics and logistics aspects
- f) Lean aspects of Materials Management

Course Learning Outcomes (CLO)

- CLO 1: The students will be able to understand and apply various concepts and theories of Sourcing, Warehousing and MM, and will appreciate these concepts while managing these functional areas for manufacturing businesses and their service providers.
- CLO 2: The students will be able to solve issues related to sourcing, warehousing and MM with the help of proper quantitative and analytical methods.
- CLO 3: In a given situation, students will be able to work on meaningful projects in the field of sourcing, warehousing, and MM with the development of proper and structured report and will be able to present it before the top management.

Reading and References

- Textbook: **Materials Management – An Integrated Systems Approach** by Prem Vrat
- Reference Book 1: **Introduction to Materials Management, 8th Edition** by Steve Chapman, Tony K. Arnold, Ann K. Gatewood and Lloyd Clive
- Reference Book 2: **The handbook of behavioral operations management: Social and psychological dynamics in production and service settings.** Oxford University Press. By Bendoly, E., van Wezel, W., & Bachrach, D. G. (Eds.). (2015).
- Reference Book 3: **Supply Chain Management. Strategy, Planning & Operation** by Chopra S., Meindl P. (2007)
- Articles, research paper and cases (if any) provided by the faculty

Pedagogy and Students Workload

The primary teaching methodology will lecture and time to time relevant articles and/or research paper and/or cases will be discussed. In some cases, small video clippings (Introductory videos and examples for the industries) will be shown to augment the learning.

At least 1 hr. of Pre-readings are expected from the students before every class so that meaningful class participation is possible. For the group project each student should spend at least 10-15 hrs. Overall, each student should spend at least 5 hrs. per week for the course apart from the classroom delivery, to ensure the learning outcomes.

Session Plan

Session	Topic	Session Learnings	Reading Materials
1	Introduction – The basic concepts of purchasing and the importance of procurement as a function	<ol style="list-style-type: none"> The terminologies used in purchasing/procurement function How procurement adds value to an organization 	<ul style="list-style-type: none"> Textbook Chapter 15 & 18 (Selective) Book Chapter: (Reference Book 1: Chapter 7) Small Handout will be provided by the faculty
2 & 3	The Strategic Sourcing	<ol style="list-style-type: none"> The step-by-step process of 	<ul style="list-style-type: none"> Articles (2 no.) will be

	Process	<p>sourcing decision making</p> <ol style="list-style-type: none"> How to manage the procurement of different category materials Using MCDM techniques for selecting the suppliers 	<p>provided by the faculty</p> <ul style="list-style-type: none"> A case will be discussed by the faculty
4	The Make Vs. Buy decision in procurement	The basis of taking an outsourcing decision while managing the procurement function	<ul style="list-style-type: none"> Article: To Make or not to Make by Ravi Venkatesan Reading – Textbook Chapter 17
5& 6	Supplier Relationship Management and role of Coordination, Cooperation and Collaboration in the Buyer-supplier relationship	<ol style="list-style-type: none"> The concept of Supplier Relationship Management The theoretical models and frameworks applied by the buyer's firm while managing the relationships with their suppliers 	Two Article(s) and one book chapter will be provided by the faculty
7	Supply Chain Contract	<ol style="list-style-type: none"> Understanding the supply chain contract and related theories Application of game theory in the supply chain contract 	<ul style="list-style-type: none"> Book Chapter (Reference Book 2): 14 (Will be provided by the faculty) Article: Will be provided by the faculty
8	Negotiation in the procurement	Understanding the different ways of negotiation while signing a supply chain contract	Book Chapter (Reference Book 2): 15 (will be provided by the faculty)
9	Global issues in Handling Value chain and logistics	Understanding the legal and cultural issues and role of control while managing global supply chain and logistics	<ul style="list-style-type: none"> A comprehensive handout will be given by the faculty A case will be discussed by the faculty
10	E-sourcing and the concept of Auctions and Reverse Auctions	Understanding the concepts of E-sourcing and various types of Auctions in procurement	Two Articles will be given by the faculty
11	Green, sustainable, and ethical procurement	<ul style="list-style-type: none"> Understanding the application of Triple bottom-line concepts in the procurement and ethical issues Inclusion of Green, sustainable and ethical clauses while developing the procurement policies 	Article will be provided by the faculty
12 & 13	Exploiting the quantity discounts while handling	<p>Extension of the EOQ model -</p> <p>Use of mathematical methods to</p>	<ul style="list-style-type: none"> Textbook Chapter 7 Book Chapter:

	the inventory with the EOQ models	exploit the quantity discount options while handling the Materials Management	(Reference Book 1): 10 • Book chapter (Reference Book 3): 11 (will be given by the faculty)
14	Multi-criteria ABC analysis	Using different criteria while conducting ABC analysis for managing materials	Article will be provided by the faculty
15	Impact of transportation in the inventory planning	the concept of total logistics cost and its application in materials management	Case will be discussed by the faculty
16 & 17	Warehousing	<ul style="list-style-type: none"> • The strategic importance of warehouses • The important dimensions while taking a warehousing decision • Managing Day-to-day operations of a warehouse 	<ul style="list-style-type: none"> • Textbook Chapter 14 • Book Chapter (Reference Book 1): 12 • A comprehensive handout will be given by the faculty
18 & 19	Lean Materials Management	<ul style="list-style-type: none"> • Understanding the basic difference between conventional and lean materials management • Application of lean methodologies while handling materials management functions of an enterprise 	<ul style="list-style-type: none"> • Textbook Chapter 1 & 9 (Selective) • Book Chapter (Reference Book 1): 16 • Case will be provided by the faculty
20	Group Presentation	<ul style="list-style-type: none"> • Development of group project report and group presentation • Learning various possible projects in the procurement and materials management area, how they should be presented before the top management, etc. through the group presentation 	NA

Assessment Scheme

Component	Weightage (%)	Assessment of Course Learning Outcome(s) (CLO)
Class Participation	10%	CLO1
Online Quizzes	30%	CLO1 CLO2
Group Project	20%	CLO3
End-Term	40%	CLO2

Academic Discipline and Integrity

Utmost care is taken as to maintain class decorum, follow the exact evaluation norms, conduct fair examinations, fair and transparent evaluation of examination papers so as to maintain the highest academic integrity.

Group Project: Each group (approx. 6 members) will be assigned a broad topic to work on. The topic cannot be changed by the group. Slight modification may be done if and only if the faculty agrees. The groups will be formed by the faculty and students cannot change their group. The project may either be a field project or a desk project. More details will be provided during the class.

The output of the group project is a typed report which should not be more than 1500 words (excluding the cover page). The cover page should mention the title of the topic, group no., name of the members and their respective roll nos. You must mention the title of the article, author's name, journal name, year of publication, volume no, issue no., and page no. in the last page of your report under "reference" in case of any literature review.

Some General Instructions:

1. Finish all your personal needs before coming to class. Leaving the classroom when the session is in progress for personal needs is strictly prohibited unless there is a medical emergency. You have to take permission in such situations before leaving the classroom.
2. Be in class on time, no latecomers will be entertained after the roll call is over.
3. Please keep your calculator ready in this course for every session.
4. Cell phones should remain switched off during the entire duration of the class and should be kept inside your bag and not on the table. Its use during the session is strictly prohibited. Any student found using the phone during the session will be asked to step out of the class.
5. No laptops are allowed inside the class unless instructed by the instructor.
6. No request will be entertained to change the class project, once finalized by the group. Plagiarism beyond 20% found in the submission (including reproduction from books, online sources, journals or from peers) will be awarded zero marks.
7. Institute's manual of policies (MoP) will be followed regarding academic integrity.
8. Please be present for every online quiz and online mid-term. The quiz dates will be announced in advance, and it is your responsibility to appear on the date of quiz. Request for make-up quiz will not be entertained at all.

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 all functional areas	Yes	
PLG2	Analytical Skills	The students will use analytical techniques to identify a business problem, and suggest a solution	Yes	
PLG3	Collaboration and	The students will exhibit voluntary cooperation	Yes	

	teamwork attributes	and effective teamwork in a group setting		
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 documents. The students will become effective and confident communicators	Yes	