

## Indian Institute of Management Udaipur

### Course Outline – MBA GSCM

<b>Course name</b>	Global Supply Chain Management		
Program	Global Supply Chain Management	Core/Elective	Core
Credits	4	Cap (if elective)	
Academic Year	2023-2024	Term	Semester 2 (Sept 2023-Dec 2023)
Course Coordinator	Sachin Sharma	Email	Sachin Sharma <Sachin.Sharma@iimu.ac.in>

<b>Instructor 1</b>	Mr. Nagendra Aswatha	Email	nagendraswatha@gmail.com
Sessions	20	Section	Entire Syllabus
Affiliation	Visiting faculty		
Office Hours	30 hrs		

<b>Instructor 2</b>	Mr. Salim Shikalgar	Email	salims@ictpl.net
Sessions	1	Section	Role of CFS in Global Supply Chains
Affiliation	Guest speaker		
Office Hours	1.5 hrs		

<b>Instructor 3</b>	TBD		
Sessions	1		
Affiliation	Guest Speaker		
Office Hours	1.5 hrs		

#### Course description

This section includes a brief description of the course:

The globalization of economies, increased competitive pressure, heightened customer expectations and emerging technologies have had a profound effect on the way organizations work and conduct their business. Organisations started focusing on supply chain process integration to bring efficiency, cost effectiveness, productivity in business process, to add value to their services to customers and gain a competitive advantage.

The global supply chain industry is characterized by high costs of operations, low margins, shortage of talent, infrastructural bottlenecks, demand from clients for investing in technology and providing one-stop solutions to all their needs, and consolidation through acquisitions, mergers and alliances. Though, in India, the Industry is still in its infancy, there is immense potential for growth. As per the latest study, the Indian logistics market is expected to grow at a CAGR of 12.17% by 2020 driven by the growth in the manufacturing, retail, FMCG and e-commerce sectors. India spends around 14.4% of its GDP on logistics and transportation as

compared to less than 8% spent by the other developing countries. 3PL logistics market in India is expected to be worth US\$ 350 billion by 2024. It is estimated that the warehouse market in India is expected to grow at a CAGR of 10% whereas freight forwarding market is expected to grow at a CAGR of 12% till 2024. The implementation of the Goods and Services Tax (GST) is making changes in the logistics landscape in the country.

The course has been designed to address various issues involved in Global Supply Chain Management which would enable students to look at logistics from a managerial perspective and equip them with the ability to take decisions when faced with different situations in the corporate world.

### Course Objectives

This course is oriented to develop a better understanding of :

- a. the concepts & key components of supply chain in International Trade
- b. the stakeholders in global supply chains
- c. the concept of Containerisation and its revolutionary impact on International trade
- d. multi-modal transportation
- e. the roles of packaging, warehousing, material handling

Specific learning objectives for the participants in this course are as follows:

- a. Examine the various contracts and documentation involved in Global supply chains
- b. Conceptualise the various modes of transportation and its implication on Logistics decisions
- c. Apply appropriate theories, models and tools to critically analyse the problems / issues in international business situations
- d. Develop innovative and creative approaches towards solving of given problems / issues in global business scenarios

Key Takeaways: At the end of this course, students should be able to

- a. Demonstrate the ability to integrate international perspectives in decision making
- b. Apply knowledge of International Business to analyse business problems critically and suggest innovative solutions
- c. Be equipped to manage business challenges in a competitive environment
- d. Communicate effectively and persuasively in an organizational context with wide variety of stakeholders

### Programme Level Learning Goals

The course aims to help students achieve the following learning goals (those which are applicable):

**Goal 1: Ability to integrate across business disciplines:** Students should be able to apply frameworks from different business disciplines.

- Identify and make connections across functional areas when looking at a business problem.
- Identify and apply concepts from multiple-functional areas comprehensively to a business problem

**Goal 2: Critical Thinking:** Students should be able to identify and analyze key issues and evaluate alternative solutions.

- Identify the relevance and importance of issues. Accurately identifies the core issue.
- Provide solutions by integrating ideas and using the available evidence.

**Goal 3: Team Dynamics:** Students should be able to work as part of a team.

- Contributes outside of team meetings:* Provide solutions by integrating ideas and using the available evidence. Completes all assigned tasks by deadline; work accomplished is thorough and comprehensive.
- Contributes to team meetings:* Helps the team by articulating the merits of alternative ideas or solutions. Offers thoughtful and constructive ideas and suggestions. Actively builds on ideas of team members. Articulates merits of alternative ideas and suggestions.
- Facilitates the contributions of team members:* Engages team members to facilitate their interaction and constructively builds upon their contribution. Encourages others to participate and complete assigned tasks to a similar level of excellence.

**Goal 4: Communication Skills (Oral):** Students should be proficient in oral communication.

- Clarity:* Argument effectively and efficiently conveyed; highly focused on the question; easily understood.
- Organization of ideas:* Coherent, comprehensive, and well-structured organization of ideas.
- Style:* Confident, enthusiastic about the topic and engages the audience in discussion.

**Goal 5: Communication Skills (Written):** Students should be proficient in development of analytical, synthetic, and writing skills.

- Clarity:* Argument is effective, concise, and easily understood. Thorough analysis of the data with compelling conclusion.
- Organization of ideas:* Coherent, well integrated, clear and structured organization of ideas..
- Style:* Writing style is appropriate for the topic and target audience.

**Goal 6: Domain Expertise:** Students should be able to develop and manage the deployment of a supply chain management solutions

- Defines the problem statement* - clearly and unambiguously
- Identifies the data required*- Data requirement is clearly and comprehensively defined
- Applies appropriate concepts to the problem*- Identifies relevant concepts and is able to apply them suitably in the context
- Analyses the data to come to meaningful conclusions*- Analyses the data using appropriate techniques and interprets the findings with a practical lens
- Provides practical solutions to the problem* -Participates in evaluation of solutions and uses a structured approach to finalizing the solution

International components of the course

Cases and study material which provides exposure to international contexts, international project components or other such engagements.

### Pre-requisites

List prerequisites for the course :

Basic understanding of Supply Chain Operations which is already covered in Semester 1

### Required Text Book(s):

International Trade Logistics by Dr Ram Singh (Oxford University Press), 2015

### Recommended Text Book(s)

Logistics Management, S.L. Ganapathi, S.K. Nandi, Oxford University Press, New Delhi, 2015

### Pedagogy

The teaching methodology will involve classroom teaching, industry interface through guest speakers who are practitioners in Global Supply Chain and project work /assignment. Students will be given the latest cases of logistics operations in international contexts aimed at resolving the challenges therein. Pedagogy includes:

- Practical Exercise
- Case Analysis / Case lets
- Assignment / Project Study

### Course Pack Distribution to students

Course material will also be issued from the Programme office from time to time. Additional course material may be shared during the course.

### Technology enabled learning component for your course

If the students are required to use various IT-enabled analytical tools, techniques, and methods, they may be listed here :

1. Understand of Microsoft Project
2. Understanding of WMS (Warehouse Management System)
3. Understanding of AutoCAD for warehouse design

### Class Preparation, Participation, and Presentation

Expectations relating to class preparation, participation, and presentations, etc may be specified here

### Session Plan

Session no.	Topic	Intended Learning Outcome	References/Material
1	Introduction to GSC- domestic and international	The student should be able to:	Reading:

	logistics elements, cost and service balance	<p>a. Understand the basic flows in domestic and international supply chains</p> <p>b. Differentiate between the stakeholders involved in domestic and international supply chains</p> <p>c. Comprehend the basic cost components in supply chains</p> <p>d. Visualize the computation of service levels in supply chains</p>	<ul style="list-style-type: none"> <li>• International Trade Logistics (ITL) Chapter 1</li> <li>• PPT on Introduction to Logistics and Supply Chain</li> </ul>
2	Walk-through a modern warehouse and a modern CFS/ICD, Warehouse cost, KPIs	<p>The student should be able to:</p> <p>a. Visualize the infrastructural elements in a modern warehouse as well as a modern CFS/ICD</p> <p>b. Understand the key differences between a modern warehouse (D.C.) and a CFS/ICD</p> <p>c. Familiarize themselves with all cost elements of a modern warehouse and a CFS/ICD</p> <p>d. Identify Key Performance Indicators for a modern warehouse and a CFS/ICD</p>	<p>Reading:</p> <ul style="list-style-type: none"> <li>• ITL Chapters 8 and 10</li> <li>• PPTs of modern warehouse and CFS</li> <li>• Excel sheet on Warehouse cost</li> <li>• PPT on Warehouse KPI Library</li> </ul>
3	Racking and material handling types, Warehouse design -CLASS,	<p>The student should be able to:</p> <p>a. Visualize the main types of racking used in modern warehouses</p> <p>b. Familiarize themselves with the main types of material handling equipments</p> <p>c. Develop insights into various aspects of warehouse design including tools like CLASS</p>	<p>Reading :</p> <ul style="list-style-type: none"> <li>• PPTs of modern warehouse and CFS</li> <li>• PPT on Material Handling Equipments</li> <li>• PPT on warehouse design tool – Computerized Layout and Simulation Software (CLASS)</li> </ul>
4	Case Study discussion on Operational Execution at Arrow Electronics	<p>The student should be able to:</p> <p>a. Develop insights to key issues involved in warehouse operations</p> <p>b. Identify problem areas in a case and suggest possible solutions</p> <p>c. Differentiate between strategic, tactical and operational issues in warehouse operations</p>	<p>Reading :</p> <ul style="list-style-type: none"> <li>• HBR Case on <b>Operational Execution at Arrow Electronics</b></li> </ul>
5	Group Projects announcement and detailing, Basics of Road Transportation, KPIs.	<p>The student should be able to:</p> <p>a. develop coordination skills to work along with other group members</p> <p>b. understand the dynamics of domestic road transport</p>	<p>Reading :</p> <ul style="list-style-type: none"> <li>• Excel sheet on Project topics group-wise</li> <li>• ITL Ch.12</li> </ul>

		c. identify key performance parameters in road transportation for first-mile pick-up and last-mile delivery in global supply chains	Reading : <ul style="list-style-type: none"> <li>• Discussion on practical situations experienced in road transport</li> </ul>
6	Costing in Road Transport, Mix of own/dedicated vs market hire-related decisions	The student should be able to: a. analyze information on costing of own vs market-hire vehicles b. compare and decide on which option is more economical – own/dedicated vehicle vs market-hire	Reading : <ul style="list-style-type: none"> <li>• Numerical exercises</li> </ul>
7	Basics of Ocean Transport, Air transport, Rail and Pipeline,	The student should be able to: a. understand the nuances of each mode of transport b. appreciate the dynamics of each mode with a cost vs transit-time trade-off	Reading : <ul style="list-style-type: none"> <li>• ITL Ch. 13 &amp; 14</li> <li>• PPTs on Ocean and Air Transport</li> </ul>
8	Multi-modal Transportation and related case study	The student should be able to: a. Comprehend the linkages in multi-modal transport b. analyze a situation and decide the best mix of multi-modal transport c. Develop insights into leveraging the benefits of multi-modal transport in global supply chains	Reading: <ul style="list-style-type: none"> <li>• ITL Chapter 16</li> <li>• PPT on MMT</li> <li>• Case study on MMT used by a garment exporter</li> </ul>
9	National Logistics Policy 2022, Gati Shakti, Port Operations Overview	The student should be able to: a. Be conversant with govt of India's latest logistics initiative viz. National Logistics Policy 2022, Gati Shakti b. Comprehend the basics of Port Operations c. Visualize the importance of ports in global supply chains	Reading: <ul style="list-style-type: none"> <li>• Pdf document on National Logistics Policy 2022</li> <li>• PPT on Gati Shakti</li> <li>• PPT on port operations</li> </ul>
10	INCOTERMS 2020, Mid-term review of Group Projects	The student should be able to: a. Be conversant with the 11 terms used in global trade- air and ocean- commonly called international commercial terms b. Judiciously use the correct INCOTERM as Global Supply Chain practitioners c. display the progress made by their individual groups on their group projects.	Reading: <ul style="list-style-type: none"> <li>• PPT on INCOTERMS 2020</li> <li>• ITL Chapter 11</li> <li>• Presentation of agenda slide and other key slides in each group in terms of progress made for the group projects</li> </ul>
11	Outsourcing Logistics in GSC - Domestic and International Case study on Exel PLC	The student should be able to: a. Identify needs for outsourcing and choose the correct partner b. Understand the difference between 1PL, 2PL, 3 PL, 4PL, 5PL	Reading: <ul style="list-style-type: none"> <li>• PPT on Warehouse Outsourcing</li> </ul>

		c. Critically examine the skill-sets of LSPs vs requirements of clients to get a win-win situation Global Supply Chains Outsourcing	<ul style="list-style-type: none"> <li>• PPT on Value-adds by a 3PL/4PL in international supply chains</li> <li>• ITL Chapter 24</li> <li>• Discussion on case highlighting the benefits and risks of outsourcing to Logistics Service Providers</li> </ul>
12	Export Procedures, LEO, B/L	The student should be able to: <ul style="list-style-type: none"> <li>a. Familiarize themselves with Process Flow in Exports</li> <li>b. Be conversant with various types of documentation involved in Export transactions with primary focus on Bill of Lading types</li> <li>c. Understand the role of various stakeholders in an export cycle</li> </ul>	Reading : <ul style="list-style-type: none"> <li>• ITL Ch.20</li> <li>• PPT on Export Procedure and Documentation in Global Trade</li> <li>• PPT on types of B/L shared by guest speaker</li> </ul>
13	Import Procedures, L/C, UCP, High sea sales	The student should be able to: <ul style="list-style-type: none"> <li>a. Familiarize himself/herself with Process Flow in Imports</li> <li>b. Be conversant with various types of documentation involved in Import transactions with primary focus on Letter of Credit types</li> <li>c. Understand the role of various stakeholders in an import cycle</li> </ul>	Reading : <ul style="list-style-type: none"> <li>• ITL Ch.20</li> <li>• PPT on Import Procedure and Documentation in Global Trade</li> <li>• Pdf and word document on UCP and High Sea Sales</li> </ul>
14	SOLAS & MARPOL Convention, IMO guidelines on Sulphur Emissions, Sustainable practices Understand International Maritime Fraud	The student should be able to: <ul style="list-style-type: none"> <li>a. Understand important maritime laws regarding Safety Of Life and Cargo at Sea - SOLAS</li> <li>b. Be conversant with maritime pollution laws like MARPOL</li> <li>c. Update himself/herself with latest Sulphur Emission Guidelines of 2020</li> <li>d. Be acquainted with various maritime frauds that happen and measures to prevent/combat them</li> </ul>	Reading : <ul style="list-style-type: none"> <li>• PPT on Understanding and Preventing Maritime Fraud</li> <li>• Pdf and word documents on SOLAS, MARPOL and Sulphur Emissions</li> </ul>
15	Inventory Management in GSC – Qualitative approach including case study	The student should be able to: <ul style="list-style-type: none"> <li>a. Comprehend the importance of inventory in global supply chains</li> <li>b. Develop an understanding of types of inventory</li> <li>c. Analyze a real-life situation of what prioritized action plan to adopt</li> </ul>	Reading : <ul style="list-style-type: none"> <li>• PPT on Inventory Optimization techniques</li> <li>• Discussion on caselet to optimize inventory across supply chains in a</li> </ul>

		in order to optimize inventory levels in a global supply chain	classic cost vs service trade-off
16	Digital initiatives in GSC including DCSA , Control Towers Usage in Transportation	The student should be able to: a. update himself/herself with the latest trends in digital supply chains b. understand the latest digital initiatives taken in container shipping c. comprehend the control tower logic used in transportation	Reading : <ul style="list-style-type: none"> <li>• Word document and PPT on Digital Supply Chains</li> <li>• Pdf on Digital Container Shipping Association</li> <li>• PPT on control tower approach to road transportation in Supply Chains</li> </ul>
17	ONDC, Network Optimization tools like CAST	The student should be able to: a. equip oneself with latest digital initiatives in ecommerce supply chain taken by GOI b. develop insights into computer-aided tools like CAST for warehouse network optimization	Reading : <ul style="list-style-type: none"> <li>• PPT on Open Network for Digital Commerce</li> <li>• PPT on Network Optimization tool-CAST</li> </ul>
18	Tackling disruptions in the post-pandemic world, Case Study	The student should be able to: a. Manage disruptions in global supply chains in the post-pandemic world b. Analyze how Toyota managed its supply chain amidst ongoing global chip shortage	Reading : <ul style="list-style-type: none"> <li>• Pdf on how disruptions are managed in a post-pandemic world</li> <li>• Case study on Toyota's Disrupted Global Supply Chain</li> </ul>
19	Project Presentations (First 5 groups)	The student should be able to: a. Develop critical thinking, team dynamics, written and oral communication skills b. build on domain expertise based on contemporary topic allocated to each group	Reading : <ul style="list-style-type: none"> <li>• PPT preparation and presentation by each group</li> </ul>
20	Project Presentations (Next 5 groups) and Career guidance opportunities	The student should be able to: a. Develop critical thinking, team dynamics, written and oral communication skills b. build on domain expertise based on contemporary topic allocated to each group c. Be familiar with current employers and job roles	Reading : <ul style="list-style-type: none"> <li>• PPT preparation and presentation by each group</li> <li>• Understanding of current job market</li> </ul>



## Evaluation Components

1	Class Participation	10
2	Quizzes (Multiple Choice & Open Ended)	20
3	Assignment / Project + Presentation	30
4	End Term Examination	40
<b>Total</b>		<b>100</b>

## Online Course Management (Moodle)/course web

Additional course materials, power point slides, tutorials and assignments are shared in the course web by respective instructors after the corresponding classes, as and when required.

## Mapping for the course with Program Level Goals

Goal 1	Goal2	Goal 3	Goal 4	Goal 5	Goal 6
Ability to integrate across business disciplines	Critical Thinking	Team Dynamics (a,b,c)	Communications Skills (Oral) (a,b,c)	Communication Skills (Written) (a,b,c)	Domain Expertise (a,b,c,d,e)
Session 1,2,4,6,8,11,12,13,15,16,17, Group Projects	Sessions 1-20	Team/Group Project	Team/Group Presentations (a,b,c) in Sessions 10, 19, 20.	Team/Group Presentations (a,b,c) in Sessions 10, 19, 20.	(a,c) Session 1,2,3,5,6,7,8,9,10,12,13,14,15,16,17.  (b,d,e) Session 4,11,18  (a,b,c,d,e) Session 19,20.