

SEMSETER-II

GANPAT UNIVERSITY									
FACULTY OF MANAGEMENT STUDIES									
Program		MBA		Branch/Spec.		MBA (Logistics & Supply Chain Management)			
Semester		II				Version		1.0.0.0	
Effective from Academic Year				2025-26		Effective for the batch Admitted in			June 2025
Subject code		IIA01SDS		Subject Name		Supply Chain Analytics, Digital Technologies and SCM Software Tools			
Teaching scheme						Examination scheme (Marks)			
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	4	0	0		4	Theory			
Hours	4	0	0		4	Practical			
Objective:									
To equip MBA students with a strategic framework to design, lead, and transform global supply chains by integrating sustainability and green principles to enhance resilience, create value, and build a lasting competitive advantage.									
Course Outcome:									
CO 1: The students will be able to demonstrate understanding of sustainable, ethical, and resilient supply chain frameworks, including ESG principles, triple bottom line, and stakeholder management, using globally recognized SCM tools.									
CO 2: The students will be able to apply analytical and digital techniques to design, manage, and optimize green logistics, warehousing, packaging, and reverse logistics processes through hands-on practice with open-source SCM software.									
CO 3: The students will be able to evaluate supply chain risks, performance metrics, and reporting frameworks, and develop integrated strategies incorporating sustainability, ethical sourcing, and circular economy principles using simulations.									
CO 4: The students will be able to create and present a comprehensive sustainable supply chain roadmap through real-world case analysis and practical application of multiple SCM tools, aligning with industry standards.									
Theory syllabus									
Unit	Content								Hrs
1	Foundations of Sustainable and Resilient Supply Chains, Strategic Imperative Beyond Cost Efficiency, Traditional vs. Sustainable Supply Chain Models, Triple Bottom Line – People Planet Profit, ESG Frameworks, Business Case for Sustainability – Risk Reputation Revenue, Stakeholder Theory and Management, Ethical Sourcing Fundamentals, Supplier Codes of Conduct and Auditing, Fair Trade and Living Wage Considerations, Managing Social Risk – Human Rights and Modern Slavery Diligence, OpenBoxes – Inventory and Supply Chain Management, Odoo Community Edition – ERP with SCM Modules.								6
2	Designing and Managing Green and Ethical Supply Chains, Green Logistics and Transportation – Mode Selection and Route Optimization, Last-Mile Delivery Innovations, Sustainable Warehousing – Energy Automation Design, Green Packaging – Reduction Reuse Recyclable Materials, Carbon Footprint Management – Scope 1 2 3 Emissions, Reverse Logistics and Waste Management – Reduce Reuse								8

	Recycle, Supplier Collaboration and Development, Circular Economy Models – Closed-Loop Systems, Product-as-a-Service and Leasing Models, Traceability and Transparency – Blockchain Concept, Transporeon Public Demo – Freight and Transport Visibility, ProjectLibre – Supply Chain Project Scheduling.	
3	Integrated Strategy for Sustainable Supply Chains, Building Supply Chain Resilience – Agility and Diversification, Nearshoring Reshoring Friend-shoring Strategies, Integrated Risk Management – Geopolitical Climate Social, Sustainability Performance Measurement – KPIs and Metrics, Sustainability Reporting and ESG Disclosures, Role of Chief Sustainability Officer, Change Management for Sustainable Transformation, Capstone – Sustainable Supply Chain Roadmap, Patagonia Worn Wear Case Study, IKEA Green Logistics Case Study, SupplyChainGuru Lite – Scenario Modeling.	8
4	Hands-on Training in SCM Tools, OpenBoxes – Inventory and Warehouse Management, Odoo Community Edition – Procurement Logistics Warehouse, ERPNext – End-to-End SCM Operations, ProjectLibre – Supply Chain Project Planning, Transporeon – Freight Allocation Route Tracking, TrackVia – Workflow Automation, Demand Forecasting Simulation, Order Tracking Process, Inventory Control Simulation, Transportation Route Optimization, Supplier Performance Analysis	8
Practical content		
Reference Books		
1.	Christopher, Martin. Logistics & Supply Chain Management. 5th Edition, Pearson, 2016.	
2.	Elkington, John. Green Swans: The Coming Boom in Regenerative Capitalism. Fast Company Press, 2020.	
3.	Savitz, Andrew W. The Triple Bottom Line: How Today's Best-Run Companies Are Achieving Economic, Social, and Environmental Success - and How You Can Too. Jossey-Bass, 2013.	
4.	Wieland, Andreas. Sustainable Supply Chain Management: A C-Suite Compendium. Springer, 2021.	
5.	Esty, Daniel C., and Winston, Andrew S. Green to Gold: How Smart Companies Use Environmental Strategy to Innovate, Create Value, and Build a Competitive Advantage. Yale University Press, 2006.	
6.	Sheffi, Yossi. The New (Ab)Normal: Reshaping Business and Supply Chain Strategy for a Post-Pandemic World. MIT CTL Media, 2020.	
7.	Bremmer, Ian. The Power of Crisis: How Three Threats – and Our Response – Will Change the World. Simon & Schuster, 2022.	
8.	Rogers, David L. The Digital Transformation Playbook: Rethink Your Business for the Digital Age. Columbia Business School Publishing, 2016.	