

SEMSETER-IV

GANPAT UNIVERSITY									
FACULTY OF MANAGEMENT STUDIES									
Program		MBA		Branch/Spec.		MBA (Logistics & Supply Chain Management) Elective Subject			
Semester		IV				Version		1.0.0.0	
Effective from Academic Year				2025-26		Effective for the batch Admitted in			June 2025
Subject code		IVA02SDS		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	2	0	0		2	Theory	100		100
Hours	2	0	0		30	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 explain the strategic business case for sustainability and the core principles governing a responsible global supply chain.									
CO 2: The students will be able to analyze the key operational components of a green supply chain, including logistics, warehousing, and carbon footprint management.									
CO 3: The students will be able to evaluate the challenges and strategies associated with ethical sourcing, supplier management, and the implementation of circular economy principles.									
CO 4: The students will be able to formulate an integrated strategy for building a resilient and sustainable supply chain, incorporating risk management, performance measurement, and stakeholder communication.									
Theory syllabus									
Unit	Content								Hrs
1	Foundations of Sustainable Supply Chains, The Strategic Imperative: Beyond Cost Efficiency, Traditional vs. Sustainable Supply Chain Models, The Triple Bottom Line: People, Planet, Profit, ESG (Environmental, Social, Governance) Frameworks, The Business Case for Sustainability: Risk, Reputation, Revenue, Stakeholder Theory & Management in Supply Chains								6
2	Designing and Managing the Green Supply Chain, Green Logistics & Transportation: Mode Selection & 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 (Conceptual), Reverse Logistics & Waste Management: The Waste Hierarchy: Reduce, Reuse, Recycle, Technology's Role: AI & IoT for Efficiency.								8
3	Ethical Sourcing and the Circular Economy, Sustainable Procurement & Ethical Sourcing: Supplier Codes of Conduct & Auditing. Fair Trade & Living Wage Considerations, Managing Social Risk: Human Rights & Modern Slavery Diligence, Supplier Collaboration & Development for Sustainability, The Circular Economy: From Linear to Closed-Loop Systems. Product-as-a-Service & Leasing Models,								8

	Traceability & Transparency: The Role of Blockchain (Conceptual).	
4	Integrated Strategy, Risk, and Reporting, Building Supply Chain Resilience: Agility & Diversification. Nearshoring, Reshoring & Friend-shoring Strategies, Integrated Risk Management: Geopolitical, Climate, Social, Sustainability Performance Measurement: KPIs & Metrics, Communicating Value: Sustainability Reporting & ESG Disclosures, The Role of the Chief Sustainability Officer (CSO), Change Management for Sustainable Transformation, Capstone: Developing a Sustainable Supply Chain Roadmap for a Global Firm	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.	