**Course Code :**

**Course Title : Supply Chain & Logistics Management**

**Semester : II**

**Credit : 4**

**Contact Hours : 40 hrs.**

**Course Faculty :**

**Course Description:**

This course is designed to cover the theory and practice of supply chain management. The course focusses on various stages of supply chain management and its integration to achieve the company’s strategic goal. The topics include Strategies in SC, logistics management, sourcing, transportation, distribution & channel management, pricing & revenue management, Cold Chain logistics, reverse logistics. It also includes SCM in different industries and the best practices. Class room sessions for all topics will be supplemented with case studies, video clips and class room. After completion of the course, students should be able to understand the concept of Supply Chain Management & Logistics and its applications in business and industry, various sub-systems in SC and the integration of all the sub systems. They should also be able to evaluate the various strategies for material storage, transportation, inventory, and sourcing.

**Contents:**

* Understanding the Supply Chain
* Strategies in SC
* Logistics management & Logistics Mix
* Logistics in E-commerce
* Sourcing & Vendor Management
* Transportation & Freight Management
* Distribution Networks & Channel Management
* Pricing & Revenue Management in SC
* Information Technology in SC
* Cold Chain Logistics & Reverse Supply Chain
* Best Practices of Supply Chain
* Supply Chain Management in Different Industries

**Session Plan**

|  |  |  |
| --- | --- | --- |
| **Sessions** | **Topics** | **w\Case Studies / Class Activities** |
| 1, 2, 3 | **Understanding the Supply Chain**  Supply Chain, Supply Chain integration, Linkages, Decisions in Supply Chain, Process Cycles, Push & Pull mechanism, Information distortion – Bullwhip effect, Causes of Bullwhip effect, Initiatives to control Bullwhip effect | Case study – Mc Donalds, Amul  Video- Asian Paints- Integration  Discussion on Pull Strategy at Asian paints |
| 4, 5 | **Strategies in SC**  Competitive and Supply Chain Strategies, Achieving Strategic Fit, Expanding Strategic Scope |  |
| 6, 7, 8 | **Logistics management & Logistics Mix**  Logistics, Scope of Logistics, Warehousing, Transportation, Material handling, Storage System, Packaging | Video based discussion on packaging and material handling |
| 9, 10 | **Logistics in E-commerce**  E-Commerce: Requirements on Logistics,  Logistics: Backbone of E Commerce,  E-logistics Structure and Operation  Logistics Resource Management | Video based discussion on Amazon |
| 11, 12 | **Sourcing & Vendor Management**  Role of Sourcing, Inhouse or Outsource? Benefits & Risks associated with outsourcing Third and Fourth Party Logistics Providers, Supplier Scoring and Assessment, Supplier Selection, Sourcing Portfolio, E-Procurement | Case study:  Boeing Outsourcing |
| 13, 14 | **Transportation & Freight Management**  Transportation & Freight Management  Transportation Infrastructure, Transportation Related Problems in SC, Transportation Networks  Freight management, Freight Management Responsibilities, Factors impacting Freight cost, Milk run, Containerization | Video- Containerization |
|  | **Class Test** |  |
| 15, 16 | **Distribution Networks & Channel Management**  Factors influencing Distribution network design, Design options for a distribution network, Online sales and the distribution network |  |
| 17, 18 | Managing Channel relationship, Channel Power, Channel Conflict, Channel Policies, Retailing |
| 19, 20 | **Pricing & Revenue Management in SC**  Role of Pricing and Revenue Management in Supply Chain, Pricing and Revenue Management for multiple customer segments, Perishable assets, Seasonal demand, Bulk and Spot contracts |  |
| 21, 22 | **Information Technology in SCM**  Role of IT in SC, Supply Chain IT Framework, Customer Relationship Management, Internal Supply Chain Management, Supplier Relationship Management, The Transaction Management Foundation, Future of IT in Supply Chain | Case study:  IT Implementation |
| 23, 24 | **Cold Chain Logistics & Reverse Supply Chain**  Cold Chain Logistics, Drivers to cold chain infrastructure, Cold Chain Technologies, Quality Control Measures, Cold Supply Chain problems & issues  Why Reverse Supply Chain, Reverse Supply Chain Design, Subsystems in Reverse Supply Chain, Reverse SC Challenges | Video – Cold Chain Logistics |
| 25, 26, 27 | **Best Practices of Supply Chain**  Tierization of Suppliers, Milk Round System, Bar Coding, RFID, Hub and Spoke Concept, Postponement, Cross Docking, Trans-shipment, Risk Management, Digitization in SCM, Agile SC, Green SC, Lean SC, EVA in SC, IOT | Video – RFID, Case study on risk management( Deloitte) |
| 28, 29, 30 | **Supply Chain Management in Different Industries**   * Automotive Industry * Pharmaceutical Industry * FMCG Industry * Fashion Industry * Various Service Industry * SMEs |  |
| 31, 32 | **Presentation** |  |
|  | **Class Test** |  |

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| **Pedagogy** |
| 1. Lecture |
| 2. Case Study |
| 3. News/ Article Analysis |
| 4. Activity/ Exercise |
| 5. Videos |

**Evaluation:**

|  |  |
| --- | --- |
| **Internal Assessment** | **40 Marks** |
| **External Assessment / End Term Exam** | **60 Marks** |
|  |  |
| ***Internal Assessment:*** |  |
| **Presentation / Assignment** | **10 Marks** |
| **Class Test** | **10 Marks** |
| **Attendance** | **10 Marks** |
| **Class Participation** | **10 Marks** |
| **Total** | **40 Marks** |

**Text Book:**

1) Supply Chain Management - V. V. Sople, Pearson, 2012

**Reference Book:**

1. Supply Chain Management-Strategy, - Sunil Chopra, Peter Meindl and Dharam

Planning and Operation Vir Kalra, Pearson, 6th Edition, 2016, Third Impression, 2017

1. Logistics Management - V. V. Sople, Pearson, 3rd Edition, 2012
2. Supply Chain Management - Janat Shah, Pearson, 2nd Edition, 2016
3. Supply Chain Management: - Rahul V. Altekar, PHI, 2nd Edition, 2006

Concepts and Cases

1. Designing & Managing the Supply Chain - Simchi-Levi, D. Kaminnsky Philip,

McGraw-Hill, 3rd Edition, 2008, 21st Reprint 2017

1. Supply Chain Management - K. Shridhara Bhat, Himalaya Publishing House, 1st Edition,

2010

**E-Book:**

1. Supply Chain Management-Strategy, - Sunil Chopra and Peter Meindl, 2015

Planning and Operation

<http://www.ebook3000.com/Supply-Chain-Management--Strategy--Planning--and-Operation_412659.html>

1. Supply Chain - Vedran Kordic, Publisher: InTech 2008

<https://www.intechopen.com/books/supply_chain>

1. Supply Chain Management - Pengzhong Li, Publisher: InTech 2011

<https://www.intechopen.com/books/supply-chain-management>

(4) Essentials of Supply Chain Management -- Michael Hugos, Wiley, Edition 4, 2018

<http://ebook3000.com/Essentials-of-Supply-Chain-Management_508529.html>

(5) Essentials of Supply Chain Management - Hokey Min, FT Press, Edition 1, 2015

<http://ebook3000.com/The-Essentials-of-Supply-Chain-Management--New-Business-Concepts-and-Applications_325796.html>

(6) Global Supply Chain and OM - Dmitry Ivanov & John Schonberger, Springer, 2017

<http://ebook3000.com/Global-Supply-Chain-and-Operations-Management--A-Decision-Oriented-Introduction-to-the-Creation-of-Value_419279.html>

(7) Supply Chain Management & Advanced Planning -- Hartmut Stadler & Christoph Kitger, Springer, 2014

<http://ebook3000.com/Supply-Chain-Management-and-Advanced-Planning_481415.html>

(8) Contemporary Approaches & Strategies for Logistics - Lincoln Wood, IGI Global, 2018

<http://ebook3000.com/Contemporary-Approaches-and-Strategies-for-Applied-Logistics_510051.html>