



Wayne County Community College District

COURSE SYLLABUS

LOG 103 INTRODUCTION TO SUPPLY CHAIN MANAGEMENT

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:

This course is designed to provide a general knowledge of Supply Chain Management (SCM) and the associated functions necessary for delivery of goods and services to customers. This course will focus on what employees and managers must do to ensure an effective Supply chain exists in their organizations. Topics include: introduction to SCM, E-Commerce, materials management, information technology, measuring SCT performance, purchasing and distribution and research and case studies.

PREREQUISITE: LOG 101

EXPECTED COMPETENCIES:

Upon successful completion of this course, the student will be able to:

- **Define supply chain management**
 - a. Define supply chain management.
 - b. Describe the objectives and elements of supply chain management.
 - c. Describe local, regional, and global supply chain management activities among services and manufacturing companies.
 - d. An understanding of how the bullwhip effect impacts supply chain members.

- **Purchasing Management**
 - a. An understanding of the role of supply management and its strategic impact on an organization' competitive advantage.
 - b. A basic knowledge of the manual purchasing process, e-procurement, public procurement, and green purchasing.
 - c. An understanding of centralized, decentralized, and hybrid purchasing organizations and their advantages.
 - d. An understanding of how globalization impacts supply management, the opportunities and challenges of global sourcing.

- **Creating and Managing Supplier Relationships**
 - a. Explain the importance of supplier partnerships.
 - b. Explain the importance of supplier recognition program.
 - c. Understand the capabilities of supplier relationship management (SRM).
 - d. Explain the benefits of using SRM software to manage suppliers.

- **Ethical and Sustainable Sourcing**
 - a. Describe the difference between purchasing and strategic sourcing.
 - b. Define and describe the terms green sourcing, vendor managed inventories, JIT II, in-sourcing, co-sourcing, and co-managed activities.



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- c. Describe the performance criteria used in assessing suppliers.
 - d. Describe how a reverse auction works.
 - e. Understand the importance of sharing the benefits of strategic partnerships.
- **Demand Forecasting**
 - a. Explain the role of demand forecasting in a supply chain.
 - b. Identify the components of a forecast.
 - c. Compare and Contrast qualitative and quantitative forecasting techniques.
 - d. Explain collaborative planning, forecasting, and replenishment.
- **Resource Planning Systems**
 - a. Describe the hierarchical operations planning process in terms of materials planning and capacity planning.
 - b. Understand the terms used in MRP (material requirements planning) computation.
 - c. Describe an ERP (enterprise resource planning) system, its advantages and disadvantages.
 - d. An understanding of the best-of-breed versus single integrator ERP implementations.
 - e. An understanding of how an integrated ERP system works.
- **Inventory Management**
 - a. Describe the four basic types of inventories and their functions.
 - b. Understand the costs of inventory and inventory turnovers.
 - c. An understanding of ABC classification, the ABC inventory matrix, and cycle counting.
 - d. Understand the EOQ model and its underlying assumptions.
 - e. Describe the continuous review and periodic review systems.
- **Process Management: Lean and Six Sigma in Supply Chain Management**
 - a. List and discuss the major elements of lean production and Six Sigma quality.
 - b. Describe why lean production and Six Sigma quality are integral parts of SCM.
 - c. Discuss the linkage between lean production and environmental protection.
 - d. Understand the importance of statistical process control for improving quality.
- **Domestic U.S. and Global Logistics**
 - a. Understand the strategic importance of logistics.
 - b. Discuss the international aspects of logistics.
 - c. Describe how logistics affects supply chain management.
 - d. Summarize the important aspects of transportation regulation and deregulation.
 - e. Describe the various reverse logistics activities.



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- f. Discuss some the e-commerce issues in logistics management.
- **Customer Relationship Management**
 - a. Describe the strategic importance of CRM.
 - b. Describe the components of a CRM.
 - c. Describe how information is used to create customer satisfaction and greater profits for the firm.
 - d. Describe some of the popular CRM applications and their suppliers.
- **Global Location Decisions**
 - a. Explain the impact of global location decisions on a supply chain.
 - b. Identify the factors influencing location decisions.
 - c. Use several location evaluation models.
 - d. Understand the advantages of business clusters.
 - e. Understand the importance of sustainable development.
- **Service Response Logistics**
 - a. Define service response logistics and describe all of its elements.
 - b. Understand the importance of service layouts and perform a layout analysis using several techniques.
 - c. Describe the strategies for managing capacity, wait times, distribution, and quality in services.
 - d. How to use various techniques for managing customers' perceived waiting times.
- **Supply Chain Process Integration**
 - a. Discuss the overall importance of process integration in supply chain management.
 - b. Understand the important issues of internal and external process integration.
 - c. Describe the various processes requiring integration along the supply chain.
 - d. Describe the various issues associated with supply chain security and risk.
- **Performance Measurement along the Supply Chain**
 - a. Describe why firms need to measure and assess performance.
 - b. Discuss the merits of financial and non-financial performance measures.
 - c. List a number of traditional and world-class performance measures.
 - d. Describe how the Balanced Scorecard and the SCOR models work

ASSESSMENT METHODS:

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.



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GRADING SCALE:

90%-100% = A

80%-89.9%= B

70%-79.9%= C

60%-69.9%= D

<60% = E