

# Supply Chain Management (SCMT)

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## Courses

### SCMT 2103. Introduction to Supply Chain Management. 3 Hours.

An introduction to supply chain management. All functional areas of supply chain management are explored to provide students an end-to-end view of supply chain management processes. Pre- or Corequisite: ISYS 2103. Prerequisite: WCOB 1033 and ECON 2023 each with a grade of C or better.

### SCMT 2103H. Honors Introduction to Supply Chain Management. 3 Hours.

An introduction to supply chain management. All functional areas of supply chain management are explored to provide students an end-to-end view of supply chain management processes. Pre- or Corequisite: ISYS 2103. Prerequisite: WCOB 1033 and ECON 2023 each with a grade of C or better.

This course is equivalent to SCMT 2103.

### SCMT 3443. Transportation and Distribution Management. 3 Hours.

Examines modes of freight transportation and institutional factors that influence transportation decisions; regulation, public policy, other governmental variables reviewed in detail. Additionally, distribution aspects of the logistics function within the firm such as warehousing, cross-docking, and distribution center management are explored. Prerequisite: (ECON 2013 and ECON 2023) or ECON 2143.

### SCMT 3613. Supply Management. 3 Hours.

Management of tactical and strategic sourcing relationships including supply aspects of the logistics function within the firm such as purchasing, procurement, forecasting, inventory control, quality, sustainability and negotiation. Prerequisite: (ECON 2013 and ECON 2023) or ECON 2143.

### SCMT 3623. Advanced Inventory Management and Forecasting. 3 Hours.

The intent of this course is to rigorously examine two key elements of logistics: inventory control and forecasting. Coverage of the former topic specifically focuses on inventory control methods for stochastic demand and lead times. Besides a review of the associated theoretical bases, the implementation of such policies in Excel is a central component of the course. Forecasting topics covered in this course include a review of a variety of forecasting techniques and forecast error measurement. Moreover, the linkage between forecasting and inventory control is discussed. As with inventory control, students will learn how to implement various forecasting techniques in Excel. Prerequisite: SCMT 3613.

### SCMT 3633. Behavioral Supply Chain Management. 3 Hours.

Effective supply chain management requires an understanding of people who make supply chain decisions. This course will expose students to behavioral issues in supply chain and logistics. Readings will be assigned weekly, with a focus on practical implications. There will be an emphasis on experiential learning and teams of students will work on course projects in the area of the retail supply chain, broadly defined. Prerequisite: SCMT 3613.

### SCMT 3643. International Transportation and Logistics. 3 Hours.

Logistics activities in international business with special emphasis on international sourcing and distribution channels, international transportation, import and export procedures, international sale and payment terms, and documentation. Special emphasis is placed on current events and their effect on the management of operations of U.S.-based organizations. Prerequisite: ECON 2013 and ECON 2023, or ECON 2143.

### SCMT 3653. Retail Supply Chain Analysis. 3 Hours.

This course examines the various function components of retail supply chain management and focuses on analysis and metrics required to effectively manage a retail supply chain. The purpose of this course is to introduce students to the various aspects of retail supply chain management. In this course, the students will learn to speak of the "language" of retailing and acquire the skills to effectively analyze the performance of retail supply chains. Prerequisite: (ECON 2013 and ECON 2023) or ECON 2143.

### SCMT 4003H. Honors Supply Chain Management Colloquium. 3 Hours.

Explores events, concepts and/or new developments in the field of Supply Chain Management. Prerequisite: Junior standing. May be repeated for up to 6 hours of degree credit.

### SCMT 4103. Special Topics in Supply Chain Management. 3 Hours.

Special topics in supply chain management not available in other courses. Topics are selected by the supply chain faculty for each semester each course is offered. Prerequisite: Junior standing.

### SCMT 4123. Sustainable Logistics and Supply Chain Management. 3 Hours.

Explores key sustainability concepts across supply chain functions of supply management, operations, and distribution. Course topics include values-based leadership, globalizing sustainability, marketing sustainability, voluntary product standards and governance, stakeholder engagement, reverse logistics, humanitarian logistics, and transportation. Overall, we will consider the feasibility and role of firms in producing sustainability in global supply chains.

### SCMT 4633. Logistics Provider and Carrier Management. 3 Hours.

Reviews special management techniques and analytical framework available for solving problems associated with companies whose core competencies include distribution and transportation modes of truck, rail, air, water, pipeline and intermodal. Prerequisite: SCMT 3443.

### SCMT 4653. Supply Chain Strategy. 3 Hours.

Design and management of supply chain systems for firms of varying size and different supply and market conditions. This capstone course relies heavily on computer assisted cases and lectures from visiting executives. Prerequisite: SCMT 3443 and SCMT 3613 and SCMT 3623.

### SCMT 466V. Independent Study in Supply Chain Management. 1-3 Hour.

Permits students to explore selected topics in supply chain management, logistics and transportation.

### SCMT 4853. Cross-Sector Collaboration for Sustainability. 3 Hours.

This course explores how organizations in the three sectors of society work together in value creation by addressing social and environmental problems manifest in global supply chains. Focusing on business and nonprofit organizations, we investigate the forces that bring about and influence these collaborations from practical and theoretical perspectives. Prerequisite: Junior Standing.

### SCMT 5123. Sustainable Logistics and Supply Chain Management. 3 Hours.

Explores key sustainability concepts across supply chain functions of supply management, operations, and distribution. Course topics include values-based leadership, globalizing sustainability, marketing sustainability, voluntary product standards and governance, stakeholder engagement, reverse logistics, humanitarian logistics, and transportation. Overall, we will consider the feasibility and role of firms in producing sustainability in global supply chains.

### SCMT 5133. Quantitative Methods and Decision Making. 3 Hours.

Utilization of information, quantitative techniques, and computer application in decision making and problem solving for managers. This course is cross-listed with ISYS 5403.

### SCMT 560V. Special Topics in Logistics. 1-6 Hour.

Explores current events, concepts, and new developments in the field of logistics and transportation. Topics are selected by the Marketing and Transportation faculty for each semester the course is offered. May be repeated for up to 6 hours of degree credit.

**SCMT 5623. Supply Chain Innovation and Technology. 3 Hours.**

This course explores innovation as a strategy to improve existing and/or invent new supply chain processes which ultimately create and/or maintain competitive advantage. Open, reverse, disruptive, incremental and breakthrough innovation concepts are explored. Design thinking is utilized to facilitate critical customer centric thinking about supply chains resulting in innovative solutions by inventing new or improving on existing processes, intellectual property, technologies, and systems. Leadership assessment techniques will be utilized to create diverse and inclusive cross-functional teams focused on current industry projects.

**SCMT 5633. Introduction to Supply Chain Management. 3 Hours.**

Supply chain management is the integration of key business processes from end user through suppliers. The focus of this course is on the core processes that must be linked throughout the supply chain with an emphasis on logistics processes. Foundational topics in logistics and supply chain management will be covered.

**SCMT 5643. Transportation Strategies in the Supply Chain. 3 Hours.**

This course focuses on the setting of objectives and the design of optimal transportation strategy and alternative means of implementing transportation strategies within different types of organizations.

**SCMT 5653. Global Logistics and Supply Management. 3 Hours.**

This course examines the planning and management of logistics, but emphasizes supplier selection and development, logistics options, strategic alliances, and performance measurement. Emphasis is placed on the integration of purchasing, materials management, and multi-firm logistics planning. International logistics is also addressed within each of these topics. Prerequisite: SCMT 5633.

**SCMT 5663. Retail and CPG Supply Chain Management. 3 Hours.**

This course examines the planning and management of supply chain activities including supplier selection and development, demand management, quick response, vendor managed inventory, logistics options, strategic alliances, and performance measurement. Emphasis is placed on the integration of purchasing, materials management, and multi-firm logistics planning.

**SCMT 5673. Modeling Retail & Consumer Products Logistics. 3 Hours.**

This is a more quantitative approach to measuring logistics performance, modeling tradeoffs and making decisions. Topics include forecasting, inventory management, network optimization, and transportation routing. Prerequisite: SCMT 5633.

**SCMT 5683. Supply Chain Management in Global Business. 3 Hours.**

Logistics management is that part of supply chain management that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirements. To achieve its objectives, logistics management requires the integration of business processes within and across organizations in a supply chain. Using hands on projects and class discussions based on case studies and current press articles, this course will expose participants to logistics management challenges faced by member organizations of retail supply chains competing in an omni-channel environment transformed by radical changes in consumer behavior, technology, and globalization. Prerequisite: SCMT 5663.

**SCMT 5693. Predictive Supply Chain Analytics. 3 Hours.**

This course will introduce students to the variety and sources of data available from different technology-enabled sources, and through cases, expose them to innovative ways in which firms are using this data to improve supply chain management processes. The course will survey standard and advanced analytical techniques used to transform this data into actionable business intelligence and students will gain hands-on experience with these techniques. They will gain an understanding of the practical considerations that arise in real-world applications by means of projects.

**SCMT 636V. Special Topics in Supply Chain Management. 1-6 Hour.**

Independent reading and investigation in supply chain management. Prerequisite: Doctoral standing.

**SCMT 6413. Fundamentals of Logistics and Supply Chain Management. 3 Hours.**

Introduces students to the key substantive areas of logistics and supply chain management. Offers a combination of lectures covering topics such as inventory control and forecasting and seminars discussing associated academic literature. Prerequisite: Admission to doctoral program. May be repeated for up to 6 hours of degree credit.

**SCMT 6423. Seminar in Structural Equation Modeling. 3 Hours.**

The seminar focuses on data analysis using structural equation modeling methodologies. The course will concentrate on four basic methodologies: exploratory factor analysis, confirmatory factor analysis, path analysis, structural equations modeling with latent variables and their applications in empirical research. Prerequisite: Graduate Standing and MKTG 6433 or ISYS 5623 or ISYS 5723 or PSYC 6343 or equivalent. May be repeated for up to 6 hours of degree credit. This course is cross-listed with ISYS 6423.

**SCMT 6433. Supply Chain Management Research. 3 Hours.**

Introduces students to major streams of SCM research and discusses the interest and merit of the research question(s), the appropriateness of the theoretical framework and/or hypothesis development, the adequacy of the research design, including data collection, measurement, and analysis (methodology), the accuracy of the discussion of the results. Prerequisite: Admission to doctoral program. May be repeated for up to 6 hours of degree credit.

**SCMT 6443. Theory in Supply Chain Management. 3 Hours.**

Provides an overview of theories from fields such as strategic management and marketing and explores applications of these theories to supply chain management research. Emphasis is placed on the development of theoretically grounded testable hypotheses in the context of a broad range of SCM research areas. Prerequisite: Admission to doctoral program.

**SCMT 6453. Behavioral Supply Chain Management. 3 Hours.**

Focuses on human behavior in supply chain management. Topics may include but will not be restricted to behavior in inventory and ordering processes, in retail store execution, in global supply chain management, in the face of adversity and catastrophic supply chain risk, and in supply chain relationships. Prerequisite: Admission to doctoral program. May be repeated for up to 6 hours of degree credit.

**SCMT 6463. Research in Retail Supply Chain Management. 3 Hours.**

Focuses on retail-related supply chain management research. Seminar topics may include but will not be restricted to retail sales and order forecasting, inventory management, and store execution issues. Prerequisite: Admission to doctoral program. May be repeated for up to 6 hours of degree credit.

**SCMT 6473. Emerging Topics in Supply Chain Management. 3 Hours.**

Covers various emerging topics, such as information technology applications in the supply chain, humanitarian logistics, supply chain security, and individual-level decision-making in the supply chain. Prerequisite: Admission to doctoral program. May be repeated for up to 6 hours of degree credit.

**SCMT 700V. Doctoral Dissertation. 1-18 Hour.**

Dissertation studies in supply chain management. Prerequisite: Candidacy. May be repeated for degree credit.