Supply Chain Management (SCHM)

**SCHM 1990. Elective. 1-4 Hours.**
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

**SCHM 2201. Supply Chain Management. 2 Hours.**
Analyzes the role and activities of those involved in supply chain management decision making. Emphasizes the importance of transportation planning, inventory control, warehouse management, development of customer service standards, and procurement in the design and operation of supply and distribution systems. Attention is given to the importance of information systems and the Internet in supporting such activities. Special attention is also given to the need to develop close working relationships with managers in other functional areas including manufacturing, information systems, marketing, and international operations. This integrative approach to management is critical in supporting supply chain cost and service improvements.

**SCHM 2301. Supply Chain and Operations Management. 4 Hours.**
Focuses on the integrative management of business activities intrinsic to the smooth flow of goods or services, information, and financial transactions across firms from raw materials to the end customer. This collaborative approach creates competitive advantages for all members of a supply chain. Emphasizes the responsibilities of managers regarding decisions concerning the design, operation, and control of supply chains and operations. Considers customers, globalization, corporate strategy, resources, sustainability, ethics, and diversity. Topics covered include customer-centric management; supply chain and operations strategies; process structure and control; and supply, inventory, and quality management. Emphasizes the key role of information technology, logistics network design, supply chain relationships, and process evolution.

**SCHM 2990. Elective. 1-4 Hours.**
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

**SCHM 3301. Global Supply Chain Strategy. 4 Hours.**
Focuses on the managerial activities of those involved in supply chain management operations and planning for companies doing international commerce. Analyzes contemporary issues that affect the design of international supply chain systems, including sourcing, logistics, transactions, risk, sustainability, and ethical considerations. Examines the current status and future prospects of the modes of international transportation as well as international trade and development issues, not only from the corporate perspective but also in terms of government policy.

**SCHM 3305. Sourcing and Procurement. 4 Hours.**
Addresses the strategic and operational role of sourcing and procurement and its impact on the supply chain as it relates to the entire organization. The selection, contracting, development and monitoring/managing of the right supplier in the right location is more often a source of competitive advantage and a major contributor to a company's bottom line. The course focuses on a variety of aspects of this function—strategy development, organization, procedures, supplier selection, negotiations, buyer-supplier relationships, quantity, quality, timeliness, and cost/price considerations for the purchase of goods and services.

**SCHM 3308. Supply Chain Analytics. 4 Hours.**
Examines state-of-the-art in analytics capabilities and how they drive supply chains, from marketing to sourcing. Examines how organizations use analytics to meet their strategic objectives, provide value to the business, and make decisions. Offers students an opportunity to develop strategic supply chain decision-making skills using the latest analytics capabilities as an enabler. Focuses heavily on industry best practices, including looking at some of the leading companies.

**SCHM 3310. Logistics and Transportation Management. 4 Hours.**
Examines the logistics and transportation operations, including the structure, challenges, and potential of the major modes of domestic transportation. Focuses on the interaction between logistics providers and shippers in the marketplace. Explores the major dynamics of the logistics marketplace and their impact on supply chain management. Seeks to provide students with a managerial perspective on controlling what is typically the most expensive component of supply chain management, transportation expenditures.

**SCHM 3320. Demand Planning and Forecasting. 4 Hours.**
Offers a practical introduction to demand (sales) planning and forecasting for business students. Focuses on the organizational processes in managing demand as well as generating a forecast, regression analysis, exponential smoothing, time-series analysis, judgmental forecasting methods, and evaluation of forecast quality. Uses real-life data and various software packages to illustrate basic concepts.

**SCHM 3330. Sustainability and Supply Chain Management. 4 Hours.**
Focuses on how to create sustainable supply chains that profitably yield high-quality, safe products without supply interruption while creating a net benefit for the employees, community, and the environment. Studies how companies measure environmental performance and use the data to motivate associates, suppliers, customers, policymakers, and the public. Also addresses the impacts of global sustainability frameworks and measures.

**SCHM 3990. Elective. 1-4 Hours.**
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

**SCHM 4401. Advanced Problems in Supply Chain Management. 4 Hours.**
Identifies and examines important issues that are of strategic importance to executives involved in supply chain management. Emphasizes the decision-making processes and tools employed by those executives in the context of corporate strategic management. While case studies are extensively employed, there is an important independent research component to the course, and research findings are discussed with the class and shared through presentations. Also involves companies and executives from supply chain service providers.

**SCHM 4971. Junior/Senior Honors Project 2. 4 Hours.**
Focuses on second semester of in-depth project in which a student conducts research or produces a product related to the student's major field. May be repeated without limit.

**SCHM 4977. Junior/Senior Honors Project 1. 4 Hours.**
Focuses on in-depth project in which a student conducts research or produces a product related to the student's major field. Combined with Junior/Senior Project 2 or college-defined equivalent for 8 credit honors project. May be repeated without limit.

**SCHM 4990. Elective. 1-4 Hours.**
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.
SCHM 4993. Independent Study. 1-4 Hours.
Allowes students who have received approval to undertake independent study in lieu of any course required in the various concentrations. Students present proposals to an Independent Studies Committee for evaluation and approval. Every proposal requires a detailed outline of the objectives and plan of study and must be accompanied by a supporting statement from the supervising faculty member under whose direction the study takes place. A copy of the final report prepared by the student is presented to the appropriate Independent Studies Committee. Further information about the Independent Studies Program can be obtained from concentration coordinators. May be repeated without limit.

SCHM 5976. Directed Study. 1-4 Hours.
Offers independent work under the direction of members of the department on chosen topics. May be repeated without limit.

SCHM 5978. Independent Study. 1-4 Hours.
Allows students who have received approval to undertake independent study in lieu of any course required in the various concentrations. Students present proposals to an Independent Studies Committee for evaluation and approval. Every proposal requires a detailed outline of the objectives and plan of study and must be accompanied by a supporting statement from the supervising faculty member under whose direction the study takes place. A copy of the final report prepared by the student is presented to the appropriate Independent Studies Committee. Further information about the Independent Studies Program can be obtained from concentration coordinators. May be repeated without limit.

SCHM 6200. Supply Chain and Operations Management. 4 Hours.
Focuses on integrative management of the flow of goods, services, and related information from product development, sourcing and procurement, production operations and control, logistics management, and attendant management of relationships between firms through delivery to end consumer. Offers students an opportunity to gain foundational knowledge on supply chain and operations management concepts and techniques.

SCHM 6201. Operations and Supply Chain Management. 3 Hours.
Focuses on the integrative management of processes and activities involved in transformation and delivery of goods and services. Offers students an opportunity to obtain foundational knowledge on operations and supply chain management concepts, techniques, and functions. Topics covered include sourcing and procurement, manufacturing and service operations, process design and control, quality management, capacity planning, demand planning and forecasting, inventory management, transportation and distribution management, interfirm relationship management, and attendant information flows.

SCHM 6208. Managing the Supply Chain. 2 Hours.
Examines the decision-making process in supply chain management. Emphasizes an integrative management approach that not only links traditional logistics management to other corporate functions, such as manufacturing, marketing, and international operations, but also synchronizes these activities with the company’s vendors and customers. Attention is also given to the importance of information systems and the Internet in supporting these linkages. This integrative approach to management is critical in supporting supply chain cost and service improvements.

SCHM 6210. Supply Chain Management. 3 Hours.
Analyzes the role and activities of those involved in supply chain management decision making. Emphasizes the importance of transportation planning, inventory control, warehouse management, development of customer service standards, and procurement in the design and operation of supply and distribution systems. Emphasis is on the importance of information systems and the Internet in supporting such activities. Special attention is also given to the close working relationships with managers in other functional areas including manufacturing, information systems, marketing, and international operations. This integrative approach to management is critical in supporting supply chain cost and service improvements.

SCHM 6211. Logistics and Transportation Management. 3 Hours.
Examines the logistics and transportation operations, including the structure, challenges, and potential of the major modes of domestic transportation. Focuses on the interaction between logistics providers and shippers in the marketplace. Explores the major dynamics of the logistics marketplace and their impact on supply chain management. Offers students a managerial perspective on controlling what is typically the most expensive component of supply chain management, transportation expenditures.

SCHM 6212. Executive Roundtable in Supply Chain Management. 3 Hours.
Structured around the participation of upper-level corporate executives in the classroom. Topics covered and executives participating are based on the most important contemporary issues in supply chain management. Operates on a seminar basis with extensive interaction between students and executives. Also comprises a strong individual research focus with students completing a major research paper during the term.

SCHM 6213. Global Supply Chain Strategy. 3 Hours.
Focuses on the managerial activities of those involved in supply chain management operations and planning for companies involved in international commerce. Analyzes contemporary issues that affect the design of international supply chain systems and strategies, including sourcing, logistics, transactions, risk, and ethical considerations. Examines the current status and future prospects of the modes of international logistics operations as well as international trade and development issues, not only from the corporate perspective but also in terms of government policy.

SCHM 6214. Sourcing and Procurement. 3 Hours.
Addresses the strategic and operational role of sourcing and procurement and its impact on the supply chain as it relates to the entire organization. The selection, contracting, development, and monitoring/managing of the right supplier in the right location is more often a source of competitive advantage and a major contributor to a company’s bottom line. Focuses on a variety of aspects of this function—strategy development, organization, procedures, supplier selection, negotiations, buyer-supplier relationship management, quantity, quality, timeliness, and cost/price considerations for the purchase of goods and services. Emphasizes the perspective of the sourcing and procurement manager. The key questions addressed in this course are: What does the manager need to know to be effective? How do they apply key concepts?

SCHM 6215. Supply Chain Analytics. 3 Hours.
Designed to develop strategic decision-making skills using the latest analytics capabilities and enabler. Examines the state of the art in analytics capabilities and how these drive supply chains, from marketing to sourcing. Also examines how organizations use analytics to meet their strategic objectives, provide value to the business, and make decisions. Focuses on industry best practices, including studying some of the leading companies.
SCHM 6216. Market-Driven Supply Chains. 3 Hours.
Introduces students to concepts of how companies may develop capabilities for managing rapid reconfiguration of supply chains, strategic outsourcing, capacity and information sharing, collaboration, contracts, and risk management. Exposes students to what suppliers need to develop to ensure responsiveness and efficiency in this changing environment. This may entail shared processes across multiple enterprises with high visibility and speed in an uncertain environment.

SCHM 6218. Offshore Outsourcing. 3 Hours.
Reviews models for offshoring activities. Explores the factors that help in deciding to offshore different business areas. Also reviews the pitfalls and the management actions needed to embark on successful offshoring. Examines the strategic and management issues generated by the outsourcing phenomenon. Supplements theoretical material with case studies of firms that have engaged in offshoring technology and product development, as well as other functions such as financial analysis, human resources, and legal services.

SCHM 6220. Growing and Protecting Business Value through the Supply Chain. 3 Hours.
Designed to provide insights into how supply chain innovators are elevating their strategic value within organizations. Focuses on a number of emerging leadership models by examining strategic, value-added opportunities for building supply chain management (SCM) innovation as a core competency; connecting SCM to boardroom goals; building an understanding of high-performance SCM systems; assessing and configuring innovative SCM strategies; and managing change in a dynamic global SCM environment. Offers students an opportunity to learn and practice the tools and frameworks and build their skills as well as diagnostically evaluate current operating models.

SCHM 6221. Sustainability and Supply Chain Management. 3 Hours.
Focuses on how to create sustainable supply chains that profitably yield high-quality, safe products without supply interruption while creating a net benefit for the employees, community, and the environment. Studies how companies measure environmental performance and use the data to motivate associates, suppliers, customers, policy makers, and the public. Also addresses the impacts of global sustainability frameworks and measures.

SCHM 6222. Managing Emerging Issues in Supply Chain Management. 3 Hours.
Focuses on developing competency in management of new and emerging issues in the supply chain across industries. Emphasizes strategic and tactical response to changes in the business environment that have major impacts on a company’s supply chain operations and competitiveness. Topics covered vary but may include supply chain changes due to mergers and acquisitions, security breach, product recalls, natural disasters, geopolitical events, sustainability, business-to-business relationship dynamics, etc.

SCHM 6223. Managing Healthcare Supply Chain Operations. 3 Hours.
Examines concepts and topics related to the design and management of supply chain operations in the healthcare sector. Focuses on activities and functions such as inventory control, order fulfillment, logistics, procurement, managing processes, relationship management, and information technology systems. Introduces various tools and techniques that enhance effective supply chain operations in healthcare organizations.

SCHM 6224. Demand Planning and Forecasting. 3 Hours.
Offers a practical introduction to demand (sales) forecasting for business students. Focuses on the organizational processes in generating a forecast, regression analysis, exponential smoothing, time-series analysis, judgmental forecasting methods, and evaluation of forecast quality. Uses real-life data and various software packages to illustrate basic concepts.

SCHM 6280. Strategic Management of Supply Chains. 3 Hours.
Analyzes the role and activities of those involved in supply chain management decision making. Emphasizes the importance of transportation planning, inventory control, warehouse management, development of customer service standards, and procurement in the design and operation of supply and distribution systems. Emphasis is on the importance of information systems and the Internet in supporting such activities. Special attention is also given to the close working relationships with managers in other functional areas including manufacturing, information systems, marketing, and international operations. This integrative approach to management is critical in supporting supply chain cost and service improvements in high-technology industries.

SCHM 6290. Sourcing, Making, and Delivering Goods in a Dynamic, Global Business Environment. 2 Hours.
Offers students an opportunity to understand the key trends and challenges associated with supply chain management (SCM), the importance of collaboration and information quality, the impact of SCM on financial performance, and emerging best practices in SCM. Specific topics in SCM, which encompasses all of the business processes involved in sourcing, making, and delivering goods, include analyzing models of SCM, strategies for synchronizing supply and demand; identifying the challenges and opportunities when supply chains are global; understanding the impact of logistics trends on the distribution-related processes of SCM; and exploring the impact of emerging trends such as sustainability, risk management, mobile and social media technologies, and regulations on the future of SCM. Open to high-technology students.

SCHM 6960. Exam Preparation—Master’s. 0 Hours.
Offers the student the opportunity to prepare for the master’s qualifying exam under faculty supervision.

SCHM 6962. Elective. 1-4 Hours.
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

SCHM 6964. Co-op Work Experience. 0 Hours.
Provides eligible students with an opportunity for work experience. May be repeated without limit.

SCHM 7976. Directed Study. 1-4 Hours.
Offers independent work under the direction of members of the department on chosen topics. May be repeated without limit.