

SUPPLY CHAIN MANAGEMENT (SCM)

Supply Chain Management (SCM) Courses

SCM 3013. Principles of Operations and Supply Chain Management. (3-0) 3 Credit Hours.

This is an introductory course in operations and supply chain management. This course explores the strategic and tactical management of a company's entire production process, from raw materials acquisition to finished product and service delivery. It focuses on the analysis and improvement of processes and aims to teach students how to deliver products and services to customers on time and at the right cost. Topics include, but are not limited to, operations management strategy, demand forecasting, inventory management, quality control, procurement, logistics, and supplier management. This course has Differential Tuition. Course Fee: DL01 \$75.

SCM 3403. Logistics Management. (3-0) 3 Credit Hours.

Prerequisite: A grade of "C-" or better in SCM 3013 and BAN 3053, or their equivalents. This course focuses on the strategies and practices involved in the efficient movement, storage, and distribution of goods and services. Students will gain practical knowledge in optimizing logistics operations, reducing costs, and enhancing customer satisfaction through effective logistics solutions. Key topics include, but are not limited to, distribution network models, vehicle routing, facility location, warehousing, layout decisions, material handling, customs and cross-border operations, distribution channels, reverse logistics, and sustainability. (Formerly MS 3403. Credit cannot be earned for both MS 3403 and SCM 3403.) This course has Differential Tuition. Course Fee: DL01 \$75.

SCM 3413. Purchasing and Supply Management. (3-0) 3 Credit Hours.

This course explores the strategic and tactical issues in procurement and supply management. Topics include, but are not limited to, purchasing process, procurement cycle, determination of requirements, supplier qualifications and relationships, appraisals, source selection, contract negotiation and management, commodity planning, buying practices, policies, ethics, and international purchasing. Cost, price, and value analysis in industrial purchasing cycle are also discussed. The course emphasizes a balance of academic and practitioner's perspectives. (Formerly MS 3413. Credit cannot be earned for both MS 3413 and SCM 3413.) This course has Differential Tuition.

SCM 4333. Project Management. (3-0) 3 Credit Hours.

This course provides a practical examination of how projects are managed from start to finish. The emphasis is on planning and control to avoid common pitfalls and manage risk. Planning includes defining objectives, identifying activities, establishing precedence relationships, making time estimates, determining project completion times, and determining resource requirements. CPM/PERT networks are established, and computer software (Microsoft Project, WINQSB, and Excel) is used to monitor and control the project. (Same as MGT 4143. Formerly MOT 4143 and MS 4333. Credit cannot be earned for more than one of the following: MS 4333, MOT 4143, MGT 4143, or SCM 4333.) This course has Differential Tuition. Course Fee: DL01 \$75.

SCM 4343. Production and Operations Management. (3-0) 3 Credit Hours.

Prerequisite: A grade of "C-" or better in SCM 3013 or its equivalent. This course covers the essential processes involved in the design, production, and delivery of goods and services. Students will gain practical skills in managing day-to-day operations, improving productivity, and ensuring smooth production processes to meet quality and delivery standards. Topics include, but are not limited to, new product design and product life cycle, processing strategies, ergonomics and work design, capacity investment analysis, aggregate planning, sales and operations planning, MRP/ERP, advanced inventory management, JIT & Toyota production system, and lean operations. (Formerly MS 4343. Credit cannot be earned for both MS 4343 and SCM 4343.) This course has Differential Tuition. Course Fee: DL01 \$75.

SCM 4353. Service Operations Management. (3-0) 3 Credit Hours.

This course is designed to provide an in-depth examination of operations management practices in service-oriented environments. The subjects introduced include topics from operations management, logistics, marketing, economics, and management demonstrated in a broad spectrum of service organizations. The course looks at strategic concepts in modern service management and presents analytical tools for business decision making. Topics include, but are not limited to, service quality, process design, facility location analysis and site selection, waiting line models, inventory management in services, demand forecasting, workforce scheduling, learning curve models, overbooking, service supply chain, and integrated service operations management. (Formerly MKT 4353 and MS 4353. Credit cannot be earned for more than one of the following: MS 4353, MKT 4353, and SCM 4353.) This course has Differential Tuition.

SCM 4363. Quality Management. (3-0) 3 Credit Hours.

Prerequisite: A grade of "C-" or better in SCM 3013 or its equivalent. This course provides an overview of key concepts, principles, and tools used in ensuring product and service quality in organizations. Students will learn how to design and implement effective quality management systems, analyze performance metrics, and foster a culture of continuous improvement to drive organizational success. Topics include, but are not limited to, foundations of quality philosophy, Total Quality Management (TQM), Six Sigma, process capability, statistical process control, leadership, organizational culture, and design thinking. (Same as STA 4803 and MAT 4803. Formerly MS 4363. Credit cannot be earned for more than one of the following: MS 4363, MAT 4803, STA 4803, or SCM 4363.) This course has Differential Tuition. Course Fee: BISP \$10; BTSI \$15.41; LRB1 \$15.41.

SCM 4543. Supply Chain Management Capstone. (3-0) 3 Credit Hours.

Prerequisite: A grade of "C-" or better in SCM 4363, SCM 3403, and SCM 4343, or their equivalents. This course is a capstone course for the majors and provides students with an opportunity to apply their knowledge of supply chain management in a real-world or simulated project. Through hands-on experience, students will integrate concepts learned to solve complex supply chain challenges. The course emphasizes problem-solving, strategic decision-making, and teamwork to deliver effective supply chain solutions. In addition to the project, the course will cover topics including procurement, supplier management, negotiations, contracting, outsourcing, closed-loop supply chains, supply chain risk management, operational hedging, supply chain performance measures, and globalization challenges. (Formerly MS 4543. Credit cannot be earned for both MS 4543 and SCM 4543.) This course has Differential Tuition.

SCM 4913. Independent Study in Operations and Supply Chain Management. (0-0) 3 Credit Hours.

Prerequisite: For business majors: A 3.0 Carlos Alvarez College of Business grade point average, permission in writing from the instructor, the Department Chair, and the Dean of the Carlos Alvarez College of Business (see academic advisor for required forms and additional requirements). Independent reading, research, discussion, and/or writing under the direction of a faculty member. This course may be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree. This course has Differential Tuition.

SCM 4933. Internship in Operations and Supply Chain Management. (0-0) 3 Credit Hours.

Prerequisite: A 2.5 university grade point average and approval in writing from the instructor, the Department Chair, and the Associate/Assistant Dean of Undergraduate Studies in the Carlos Alvarez College of Business (see academic advisor for required forms and additional requirements). Supervised full- or part-time work experience in operations and supply chain management. Offers opportunities for applying operations/supply chain management in private businesses or public agencies. A written report is required. May be repeated for credit, but not more than 6 semester credit hours will apply to a bachelor's degree. This course has Differential Tuition.

SCM 4953. Special Topics in Operations and Supply Chain Management. (3-0) 3 Credit Hours.

Prerequisite: Consent of instructor, Department Chair, and Dean. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special studies may be repeated for credit when the topics vary. This course has Differential Tuition.