SUPPLY CHAIN MANAGEMENT (SCMG)

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SCMG 232 Introduction to Supply Chain Management (3 Credit Hours)

Introduction to the concept of supply chain management, including a broad overview of main functional roles such as procurement, transportation, and inventory. Introduction to best practice methods for planning and managing supply chains, including how to do so efficiently, ethically, and sustainably. Methods include analytics and lean management.

Course equivalencies: SCMG332/332H/SCMG232/232H Outcomes:

Understanding of fundamental activities in supply chain management, methodologies to support those activities, and how they impact a firm both in terms of its profit and its impact on society and the planet

SCMG 232H Introduction to Supply Chain Management-Honors (3 Credit Hours)

Introduction to the concept of supply chain management, including a broad overview of main functional roles such as procurement, transportation, and inventory. Introduction to best practice methods for planning and managing supply chains, including how to do so efficiently, ethically, and sustainably. Methods include analytics and lean management.

Course equivalencies: SCMG332/332H/SCMG232/232H Outcomes:

Understanding of fundamental activities in supply chain management, methodologies to support those activities, and how they impact a firm both in terms of its profit and its impact on society and the planet

SCMG 332 Operations Management (3 Credit Hours)

Pre-requisites: Sophomore standing and minimum grade "C-" ISSCM 241 Introduction to concepts and methods for managing production and service operations. Topics include demand forecasting, aggregate and capacity planning, inventory management, facility layout and location, just-in-time, managing quality, project planning, resource allocation, and logistics.

Course equivalencies: SCMG332/332H/SCMG232/232H Outcomes:

Understanding of basic issues and role of operations management in organizations, and of tools for problem-solving in operations management

SCMG 332H Operations Management - Honors (3 Credit Hours)

Pre-requisites: Sophomore Standing or above; minimum grade of "C-" in ISSCM 241 or ISSCM 241H; Restricted to SBA Honors Students Introduction to concepts and methods for managing production and service operations. Topics include demand forecasting, aggregate and capacity planning, inventory management, facility layout and location, just-in-time, managing quality, project planning, resource allocation, and logistics.

Course equivalencies: SCMG332/332H/SCMG232/232H Outcomes:

Understanding of basic issues and role of operations management in organizations, and of tools for problem-solving in operations management

SCMG 337 Fundamentals of Lean Production (3 Credit Hours)

Pre-requisites: Junior Standing, minimum grade of "C-" in SCMG 332 or SCMG 332H or SCMG 232 or SCMG 232H

Methods for managing manufacturing and service operations based upon Toyota Production System. Topics include the principles of JIT and lean production, pull production, setup reduction, preventive maintenance, cellular manufacturing, employee empowerment, and supplier partnerships.

Course equivalencies: OPMG337 / MGSC337

Outcomes:

Understanding of concepts and tools for reducing waste and continuously improving operations based upon Toyota's success-proven approach

SCMG 338 Global Transportation (3 Credit Hours)

Pre-requisites: Sophomore Standing

Minimum grade of "C-" in SCMG 332 or SCMG 332H or SCMG 232 or SCMG 232H. This course examines how business partners like suppliers, manufacturers, distributors, and retailers work together to gain competitive advantage in moving products and services around the world to satisfy customers.

Interdisciplinary Option: International Business Course equivalencies: OPMG338 / MGSC338

Outcomes:

Understanding best practices like vendor managed inventory and category management and the application of information technologies for sharing information

SCMG 340 Global Sourcing (3 Credit Hours)

Pre-requisites: Sophomore Standing; minimum grade of "C-" in SCMG 332 or SCMG 332H or SCMG 232 or SCMG 232H

An examination of the planning and management of global supply chain operations. Emphasis placed on the areas of sourcing and procurement. Each area analyzed in terms of key goals, operational processes, technology applications and performance control mechanisms. *Outcomes:*

Develop critical thinking skills concerning the supply and sourcing function; Focus on strategic issues that face a sourcing organization

SCMG 341 Quality Management & Continuing Improvement (3 Credit Hours)

Pre-requisites: Junior Standing, minimum grade of "C-" in SCMG 332 or SCMG 332H or SCMG 232 or SCMG 232H

This course examines various philosophies, methods, and tools for quality management and continuous improvement of products, services, and processes. Topics include total quality, quality costs and measures, quality of design, quality awards and standards, statistical process control, Six Sigma and problem-solving techniques.

Course equivalencies: ISOM341 / MGSC341

Outcomes:

Basic understanding of total quality, quality costs, measures, statistical process control, Six Sigma, process improvement, and problem-solving techniques

SCMG 342 Supply Chain Modeling (3 Credit Hours)

Pre-requisites: Junior Standing, minimum grade of "C-" in SCMG 332 or SCMG 332H or SCMG 232 or SCMG 232H

This course studies various analytical methods and tools for making decisions that will lead to cost effective products, services and processes. Topics include developing decision-making optimization models and implementing those models in Excel. The course will highlight models used in supply chain management; including facility location, transportation network design and vehicle routing. *Outcomes:*

Basic understanding of optimization modeling, implementing optimization models in Excel and problem-solving techniques

SCMG 346 Sustainable Supply Chain (3 Credit Hours)

Pre-requisites: Junior Standing, minimum grade of "C-" in SCMG 332 or SCMG 332H or SCMG 232 or SCMG 232H

Sustainability has emerged as a central issue in today's business world. Environmental issues such as global warming, increasing waste and pollution, depleting natural resources combined with societal issues such as health, safety, equality and development put an unprecedented pressure on companies to realign their businesses while remaining profitable and competitive.

Outcomes:

The course consists of three main modules: Eco-Efficiency; Eco-Effectiveness; and Sustainable Supply Chain

SCMG 383 Management of Service Operations (3 Credit Hours)

Pre-requisites: Junior Standing, minimum grade of "C-" in SCMG 332 or SCMG 332H or SCMG 232 or SCMG 232H

This course studies the management of service businesses in general, and how services are delivered to the customer in particular. *Course equivalencies:* ISOM383 / MGSC383 *Outcomes:*

Understanding how services differ from manufactured goods, and how service management requires unique tools for managing customer expectations while simultaneously delivering services that exceed those expectations

SCMG 395 Independent Study in Operations Management (1-3 Credit Hours)

Independent study is in-depth research or reading, initiated by the student and jointly developed with a faculty member in a specialized area of Operations Management not otherwise covered by departmental course offerings. Variable Credit. May count for Operations Management major or minor. Permission of Assistant Dean required.

SCMG 396 Supply Chain Seminar (0 Credit Hours)

Professional speaker series for all students majoring in Supply Chain Management. Students will benefit from hearing professionals in the supply chain industry discuss current events, opportunities and challenges within the industry.

SCMG 399 Special Topics in Operations Management (1-3 Credit Hours)

Special topics are scheduled classes offered on an ad hoc basis. Specific titles, prerequisites and content will vary.

SCMG 480 Intro to Operations Management (3 Credit Hours)

Introduction to concepts and methods for managing operations in manufacturing and service organizations. Topics typically include forecasting, capacity and aggregate planning, material requirements planning, scheduling, facility layout and location, inventory management, just-in-time, total quality management, project planning, and logistics. *Course equivalencies:* ISOM480 / MGSC480 *Outcomes*:

Students will understand the basic issues and role of operations management in organizations and learn tools for problem-solving in operations management

SCMG 480B Operations Management (3 Credit Hours)

Pre-requisites: Restricted to MBA Baumhart Scholars students This course explores concepts and methods for managing operations, including forecasting, capacity and aggregate planning, sustainable management, material requirements planning, scheduling, project planning, logistics, supply chain transparency, and supplier diversity. *Outcomes:*

Students will understand the basic issues and role of operations management in organizations and learn tools for problem-solving in operations management

SCMG 481 Performance Improvement in Business Processes (3 Credit Hours)

Focuses on process view of the organization and provides students with a formal approach to designing, monitoring and improving business processes. The course provides the tools, methods and practical examples to help managers learn how to think from a process standpoint and how to ensure critical processes are controlled and functioning efficiently and effectively in their organization.

Course equivalencies: ISOM481 / MGSC481 Outcomes:

Understanding of the quality management concepts, performance improvement frameworks (Six Sigma, ISO, Baldridge), and process improvement practices using a step-by-step problem solving methodology

SCMG 481E Performance Improvement in Business Processes (1.5 Credit Hours)

Enrollment is restricted to students in the Executive MBA Program. Focuses on teaching students how to successfully analyze a business process, research methods for improving a process, and adapt/integrate the improvement methods into the business process in a prioritized and actionable manner. The course accomplishes this through the concepts of benchmarking, best practices, and performance improvement principles.

Course equivalencies: OPMG 603E/OPMG 481E

SCMG 482 Lean Production Concepts and Practices (3 Credit Hours) Methods for managing manufacturing and service operations based upon Toyota Production System. Topics include the principles of JIT and lean production, pull production, setup reduction, preventive maintenance, cellular manufacturing, standard operations, visual management, employee empowerment, and supplier partnerships.

Course equivalencies: ISOM482 / MGSC482

Outcomes:

Understanding of concepts and tools for reducing waste and continuously improving operations based upon Toyota's success-proven approach

SCMG 483 Management of Service Operations (3 Credit Hours)

Pre-requisites: SCMG/ISSCM 480

This course explores the application of operations management concepts and techniques in service-sector organizations, and, in particular, how services are delivered to the customer.

Course equivalencies: OPMG483/CSIS483

Outcomes:

Understanding how service management requires unique tools for managing customer expectations while simultaneously delivering services that exceed those expectations

SCMG 486 Global Logistics (3 Credit Hours)

Pre-requisites: Graduate School of Business student

This course examines how business partners along the supply chain can work together to gain competitive advantage in moving products and services around the world to satisfy customers.

Outcomes:

Understanding best practices like vendor-managed inventory and category management, and the application of information technologies for sharing information

SCMG 486E Global Supply Chain Management (1.5 Credit Hours)

Explores the current business revolution in global logistics and partnering by members of the supply chain to more effectively provide products and services to customers. Must be part of the Cohort of Executive MBA (EMBA) students to enroll.

SCMG 487 Purchasing Management (3 Credit Hours)

Pre-requisites: Graduate School of Business students

A study of organizational procurement processes and decision making framework. Topics include in-sourcing/out-sourcing decisions based on total cost of ownership; purchasing cycle and processes; developing material and technical specifications; supplier evaluation, selection and management; supplier quality management; purchasing capital goods and services; global sourcing and e-commerce; and purchasing tools and analytics.

Outcomes:

Students will have developed an understanding of fundamental and strategic issues in material planning and procurement, with the ability to source in a global marketplace

SCMG 488 Inventory Management (3 Credit Hours)

Pre-requisites: Graduate School of Business students

A study of the fundamental principles of effective management of inventory with emphasis on inventory costs, product stratification, performance measures, demand forecasting, periodic and continuous review, safety stock, material requirements planning, customer service and use of technology in inventory management. Issues related to storage and handling of inventory stock are also studied. *Outcomes:*

Students will have developed an understanding of the issues involved in planning, managing and control of inventories and materials in a supply chain

SCMG 489 Supply Chain Analytics (3 Credit Hours)

Pre-requisites: Graduate School of Business students

A study of the design, development, and use of decision models for analysis of supply chain problems. This course provides an exampledriven approach to learn about important supply chain models, problems, and solution methodologies. The objectives of this course are to develop valuable modeling skills that students can appreciate and use effectively. *Outcomes:*

Students will have developed an understanding of the issues involved in the use of decision support tools for analysis of supply chain problems

SCMG 499 Independent Study-Production & Operations Management (3 Credit Hours)

Independent study is in-depth research or reading, initiated by the student and jointly developed with a faculty member, into a specialized area of operations management not otherwise covered by department course offerings.

SCMG 589 Supply Chain Management Consulting (3 Credit Hours)

Pre-requisites: SCMG 480 Intro to Operations Mgmt; Graduate School of Business students

This course is the capstone of the Supply Chain Management Portfolio of the Master of Science in Supply Chain Management curriculum. As such, it is designed to integrate course topics covered in the foundation courses and engage students in discussions of critical supply chain leadership topics.

Outcomes:

Students will have developed an understanding of how to apply the concepts learned throughout the Supply Chain Management curriculum to a variety of full scale problems

SCMG 603E Performance Improvement in Business Processes (1.5 Credit Hours)

Restricted to Executive MBA students. This course focuses on the process view of the organization and provides students with a formal approach to designing, monitoring and improving business processes. The course provides tools, methods and practical examples to help managers learn how to think from a process standpoint and how to ensure critical processes are controlled and function efficiently and effectively.

Course equivalencies: OPMG 603E/OPMG 481E Outcomes:

Understanding the quality management concepts, performance improvement frameworks (Six Sigma, ISO, Baldridge), and process improvement practices using a step-by-step problem solving methodology

SCMG 799 Special Topics in Supply Chain Management (3 Credit Hours)

Scheduled classes are offered on an ad hoc basis. Specific titles, prerequisites and content will vary.

Outcomes:

Students will be able to demonstrate understanding of specialized topics not otherwise covered by department regular course offerings