SUPPLY CHAIN MANAGEMENT AND ANALYTICS (SCMA)

SCMA 191 Special Topics in Supply Chain Management
Description: Variety of topics on the undergraduate level.
Credit Hours: 1-3
Min credits per semester: 1
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded with Option

SCMA 250 Spreadsheet Analytics
Prerequisites: BSAD 50; Co-requisite or prerequisite: ECON 215.
Notes: Cannot be taken Pass/No Pass. SCMA 250 can be used to replace a D or F grade in SCMA 350L.
Description: Organization, analysis and evaluation of data using advanced features of Microsoft Office to solve business problems.
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 1
Grading Option: Graded
Prerequisite for: ACCT 309; FINA 361; SCMA 350

SCMA 331 Operations and Supply Chain Management
Prerequisites: Sophomore standing; 2.5 GPA; Business Qualified (MATH104 or MATH106 or MATH107 or MATH208; BSAD220; ACCT201 and ACCT202; ECON211 and ECON212; ECON215 or equivalent.) Prereqs differ for RAIKES, ACTS, and ABUS majors - see bulletin for exceptions.
Notes: Cannot be taken Pass/No Pass.
Description: Analytical management techniques for: ascertaining demand for the organization's goods and services; justifying and acquiring the necessary resources; and planning and controlling the transformation of resources into goods and services. Application in both large and small organizations, private and public enterprise, service, and manufacturing organizations.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded
Prerequisite for: ACCT 308; MRKT 444, SCMA 444; SCMA 431; SCMA 432; SCMA 434; SCMA 436; SCMA 437; SCMA 439; SCMA 447; SCMA 474

SCMA 335 Supply Chain Decision Making Models
Prerequisites: BSAD 50; (MATH104 or MATH106 or MATH107/ MATH107H or MATH208/MATH208H; ACCT201 or ACCT201H or RAIK181H; ECON211 or ECON211H or RAIK282H; ECON212 or ECON212H or RAIK182H; ECON215 or ECON215H or STAT218). 2.5 GPA
Description: Quantitative decision making tools for Supply Chain Management applications.Development of optimization models for applications in transportation and distribution networks, operations scheduling, and inventory planning.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded
Prerequisite for: SCMA 432; SCMA 439; SCMA 447; SCMA 474

SCMA 346 Marketing Channels Management
Crosslisted with: MRKT 346
Prerequisites: MRKT 341
Description: Basic concepts used in analyzing marketing channels, identifies the issues of designing sound channels, the issues of managing them effectively, and evaluating their performance.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded
Prerequisite for: SCMA 439; SCMA 474

SCMA 350 Business Analytics/Information Analysis
Prerequisites: Sophomore standing; SCMA 250; 2.5 GPA; Business Qualified (MATH104 or MATH106 or MATH107 or MATH208; BSAD220; ACCT201 and ACCT202; ECON211 and ECON212; ECON215 or equivalent.) Prereqs differ for RAIKES, ACTS, and ABUS majors - see catalog.
Notes: Cannot be taken Pass/No Pass.
Description: Data and information as important resources to be managed in modern organizations. Development of quantitative analytical skills and presentation in business decision making. Basic information system concepts with primary focus on data analysis and related business decisions.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded
Prerequisite for: SCMA 437; SCMA 450; SCMA 451; SCMA 452; SCMA 454; SCMA 458; SCMA 459

SCMA 350H Honors Business Analytics/Information Analysis
Prerequisites: COB Honors students only. Sophomore; SCMA250; 2.5 GPA;Business Qualified (MATH104 or MATH106 or MATH107 or MATH208; BSAD220; ACCT201 and ACCT202; ECON211 and ECON 212; ECON215 or equivalent) Prereqs differ for RAIKES, ACTS, and ABUS majors - see catalog.
Notes: Cannot be taken Pass/No Pass.
Description: Data and information as important resources to be managed in modern organizations. Development of quantitative analytical skills and presentation in business decision making. Basic information system concepts with primary focus on data analysis and related business decisions.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded
Prerequisite for: SCMA 450; SCMA 451

SCMA 391 Special Topics
Prerequisites: Permission of department chair
Notes: Topic varies. Specific topic covered in any given term and credit awarded is to be determined by the instructor.
Credit Hours: 1-6
Min credits per semester: 1
Max credits per semester: 6
Max credits per degree: 12
Grading Option: Graded with Option

SCMA 395 Professional Internship
Crosslisted with: BSAD 395, ACCT 395, ACTS 395, ECON 395, FINA 395, MNGT 395
Prerequisites: An undergraduate major in the College of Business with at least sophomore standing and departmental consent and acceptance into an approved internship. Departmental credit for course cross-listings may have additional requirements for consent.
Notes: May be repeated.
Description: Provides an opportunity to study theories, principles, practices, techniques, and strategies utilized in the business field through an internship related to the major field of study and an integral or important part of their program of study. Reflect on classroom knowledge and develop practical experience in professional business situations through an approved internship.
Credit Hours: 0-3
Min credits per semester:
Max credits per semester: 3
Max credits per degree: 6
Grading Option: Graded with Option

SCMA 396 Independent Study
Prerequisites: Junior standing; permission of supervising instructor and department chair
Description: Special research project or reading program.
Credit Hours: 1-6
Min credits per semester: 1
Max credits per semester: 6
Max credits per degree: 12
Grading Option: Pass No Pass

SCMA 396H Independent Study
Prerequisites: Good standing in the University Honors Program or by invitation; permission of instructor and department chair
Description: Special research project or reading program.
Credit Hours: 3-6
Min credits per semester: 3
Max credits per semester: 6
Max credits per degree: 12
Grading Option: Pass No Pass

SCMA 431 Enterprise Management Systems
Prerequisites: SCMA 331; 2.5 GPA
Description: Analytical approach to the design, planning, and control of operations management systems, including domestic and international, manufacturing and service operations.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded

SCMA 432 Supply Chain Planning and Control Systems
Prerequisites: SCMA 331; SCMA 335; MRKT 341; 2.5 GPA
Description: Forecasting and planning for capacity management, materials management, utilization of facilities, managing and scheduling inventory, scheduling people and equipment, tracking people, orders, and equipment to ensure the accommodation of customer needs while maintaining effective and efficient processes.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded

SCMA 434 Lean Supply Chain Operations
Prerequisites: SCMA 331; 2.5 GPA
Description: Focus on the improvement of supply chain operations through the application of lean management principles.Topics include just-in-time, six-sigma, theory of constraints, and associated tools and applications.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded

SCMA 436 Project Management
Prerequisites: SCMA 331; 2.5 GPA
Description: Planning and managing projects including project initiating and bidding, planning, budgeting and cost estimation, scheduling, managing risks, and final implementation.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded

SCMA 437 Supply Chain Risk Management
Prerequisites: SCMA 331; SCMA 350; 2.5 GPA
Description: Analytical and simulation models for decision making in functional areas such as finance, accounting, marketing, personnel, operations, and inventory. Construction of decision models for practical applications. Emphasis on analyzing alternatives and implementing solutions that result in increased productivity.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded
Course and Laboratory Fee: $20

SCMA 439 Global Sourcing and Distribution
Prerequisites: SCMA 331; SCMA 335; MRKT 346; 2.5 GPA
Description: Sourcing strategies, concepts and tools in the context of integrated supply chains.Specific issues include make or buy decisions, supplier evaluation and selection, total cost of ownership, contracts and legal terms, negotiation, and purchasing ethics.Discussion of supply chains in the context of international trade.Purchasing options, to include benefits and risks in outsourcing.Information technology for control and coordination in international supply chains.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded

SCMA 444 Supply Chain Logistics Management
Crosslisted with: MRKT 444
Prerequisites: MRKT 341 and SCMA 331
Description: Examination of physical distribution activities in the marketing mix from the viewpoints of both providers and users of components of logistics systems. Logistics problems of concern to the marketing manager include time and place utility concepts, spatial relationships of markets, channel design, transportation modes, and inventory management.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded

SCMA 447 Supply Chain Technology
Prerequisites: SCMA 331; SCMA 335; MRKT 341; 2.5 GPA
Description: Fundamentals of technology to include radio frequency identification systems (RFID). Description of physical characteristics, potential to support supply chain management, and implications on inventory management within supply chains.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded

SCMA 450 Data Modeling and Computing
Prerequisites: SCMA 350
Notes: The course is designed for students interested in Business Analytics in all business majors, as well as students who are primarily interested in the applications of computational modeling and statistical programming in fields such as engineering, basic sciences, sociology, psychology.
Description: Introduction to advanced data and statistical modeling techniques for business analytics applications. Introduces statistical computing tools and techniques using the R statistical programming language. Demonstrates the role of data analytics and modeling techniques in business applications. Bayesian-thinking concepts will also be studied in relation to decision-making under uncertainty.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded
Offered: FALL

SCMA 451 Introduction to Predictive Analytics
Prerequisites: SCMA 350; 2.5 GPA
Description: This course expands the basic statistical and analytics tools for developing understanding of advanced methods for data analysis and modeling, business strategy, information technology in order to develop automated structures to support decision making. The course is intended to provide tools for business applications working with data, databases and reports from analytic models. It covers fundamentals of data analysis and inferential statistics as wells as predictive modeling techniques; including linear regression, logistic regression, structural equation modeling, decision trees, artificial neural networks and support vector machines. The course is intended for students interested in Business Analytics in all Business Majors as well as students who are primarily interested in the applications of data mining from fields such as engineering, basic sciences, sociology, psychology etc.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded

SCMA 452 Database Organization and Management
Prerequisites: SCMA 350; 2.5 GPA
Description: Database technology and related human and managerial considerations. Databases from two perspectives: the logical view, as the manager and applications programmer see and use the organization's data; and the physical view, as the systems software programmers and database manager view the data. Theory on database organization and the practical applications of databases.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded
Course and Laboratory Fee: $20

SCMA 454 Information Systems Analysis and Design
Prerequisites: SCMA 350; 2.5 GPA
Description: Methods and methodologies used in systems analysis, design, and implementation. Decision-making process: systems development life cycles, requirement analysis, logical and/or conceptual design, and basic database concepts.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded
Course and Laboratory Fee: $20

SCMA 458 Electronic Business
Prerequisites: SCMA 350; 2.5 GPA
Description: Management-related topics in electronic business. Conceptualizing and maintaining an e-business strategy. Economic impact of e-business strategies and management practices, models of e-business, electronic payment systems, Internet security, ethics and privacy, and advanced e-business trends and issues.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded
Course and Laboratory Fee: $20

SCMA 459 Global Information Systems
Prerequisites: SCMA 350; 2.5 GPA
Description: The worldwide political and economic changes in the last decade that have propelled city, state, country governments, and corporations to expand business globally and enter into new markets. Information technology (IT) as a key role in the globalization of businesses. The necessary concepts and ideas to understand the issues in the global or international use of information technology. IT environments around the world, national infrastructures and regulatory regimes, global IT applications, global IS development strategies, global management support systems, and global IT management strategies.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded
Course and Laboratory Fee: $20

SCMA 474 Strategic Supply Chain Management
Prerequisites: Senior Standing; Open to SCMA Majors Only; SCMA 331; SCMA 335; MRKT 346; 2.5 GPA
Description: The focus of this course is on bringing together the concepts and theories of Supply Chain Management through the application in real world settings. Students will emulate decision making through simulated applications and will work with local/regional organizations to make improvements or explore opportunities enhancing supply chain applications.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded

SCMA 499H Honors Thesis
Prerequisites: Good standing in the University Honors Program or by invitation, and permission
Description: Conduct a scholarly research project and write a University Honors Program or undergraduate thesis.
Credit Hours: 3-6
Min credits per semester: 3
Max credits per semester: 6
Max credits per degree: 6
Grading Option: Graded with Option