

# SCLM - Supply Chain, Logistics, and Maritime Operations

## **SCLM 201 Introduction to Spreadsheet Applications (1 Credit Hour)**

The spreadsheet has become one of the most widely used analytical tools in the modern world. This course introduces students to the use of spreadsheet (e.g., MS Excel). Topics include: formulas, functions, sorting and filtering, and pivot tables. Besides the spreadsheet capabilities, the course will cover spreadsheet applications in the supply chain, logistics and maritime industry.

## **SCLM 303T Maritime Leadership, Technology, and Society (3 Credit Hours)**

This course introduces students to the intersections between maritime leadership, technology, and society. It will explain the important elements of the marine transportation and technological systems, which consist of waterways and ports that allow for various modes of transportation to move people and goods to, from, and on the water. Specific topics include an introduction to different types of cargo, how cargo is moved, ship types, ship equipment, ship routes, basic navigation and ship stability, emerging industries including offshore wind and autonomous systems, maritime law, maritime safety, and leadership.

**Prerequisites:** ENGL 110C

## **SCLM 304 Operations in a Global Environment (3 Credit Hours)**

This course examines strategic, tactical and operational issues in the planning and control of manufacturing and service delivery operations in an increasingly globalized world. This course examines such topics as process design, capacity, materials planning and control, inventory decisions, location and layout, quality and scheduling.

**Prerequisites:** STAT 130M

## **SCLM 370 International Logistics (3 Credit Hours)**

The course examines international logistics and terms for movement of goods and analyzes how companies enter into foreign markets and participate in international trade. It discusses processes and concepts involved in domestic and international multimodal transportation. It also covers operational issues such as payment, commercial documents, insurance, and customs.

**Prerequisites:** Junior standing

## **SCLM 380 Multimodal Freight Transportation (3 Credit Hours)**

The course includes an overview of the key elements of multimodal freight transportation. It examines modes of transportation, transportation economics, and transportation technology, as well as costing and pricing for transportation. The relationships between intermediaries (including third party-logistics companies), carriers, and shippers are discussed. It also provides an overview for transportation risk, transportation software as well as issues on global logistics.

**Prerequisites:** SCLM 370

## **SCLM 410 International Transportation Law and Policy (3 Credit Hours)**

The logistics activities are increasingly global and are influenced by a system of national and international laws. This complex industry requires an understanding of the regulations and legislation for freight transportation flows. This course will cover domestic and international supply contracts for freight cargo, Incoterms, international law of the sea, maritime jurisdiction, regulation of shipping, carriage of goods, cargo and marine insurance, salvage, marine environmental law, safety at sea, along with other relevant transportation laws.

**Prerequisites:** Junior standing

## **SCLM 414 Maritime Operations (3 Credit Hours)**

This course covers the operation of assets related to maritime transportation, including seaports, vessels fleets in the movement of cargo domestic and international cargo. It presents concepts related to organization and operation of ports. It discusses issues involved in planning, investment, communication systems, congestion, pollution, safety, security; intermodal transportation; water and land accessibility; and port competition and cooperation. Examines freight shipping organizations operations. Topics include vessel fleet, shipping markets, operations, costs, insurance, and regulations; and ship types, safety, role of the flag state, pollution, chartering and purchase, and understanding of the shipbuilding and ship repair market.

**Prerequisites:** SCLM 370

## **SCLM 415 Maritime and Supply Chain Safety and Security (3 Credit Hours)**

This course examines methods to anticipate threats and mitigation strategies for securing the supply chain and increasing its resilience. It provides an overview of international and U.S initiatives to ensure the security of logistics assets, cargo, people, and infrastructure within the maritime and supply chain domain. The course also addresses threats to the international trade (including maritime piracy, terrorism, cyber threats), and state-of-the-art techniques and tools for protecting the industry against cyberattacks, as well as roles and responsibilities of the supply chain actors.

**Prerequisites:** Junior standing

## **SCLM 419 Maritime and Supply Chain Risk and Insurance (3 Credit Hours)**

This course examines the risks associated with supply chain operations, including aspects of identification, analysis, assessment, response, and control of the risks associated with the transportation and storage of goods. It covers risk assessment as a function of threats, vulnerabilities, and consequences for operational performance for all modes of transportation. Topics include Lloyd's and the London Insurance Market, principles of insurance and law, international liability conventions, institute clauses, exclusions, cargo policies, particular and general average, and salvage insurance.

**Prerequisites:** SCLM 370

## **SCLM 430 Sourcing and Negotiation (3 Credit Hours)**

An overview of the strategic sourcing of materials and services in the organization and its role in the supply chain. Topics include sourcing decisions, price/cost analysis, quality issues, purchasing, supplier selection, legal and ethical issues, third party logistics, freight forwarding, and acquisition of services and capital assets. This course also covers supply and procurement negotiations. It examines conceptual and practical skills in negotiations. Students will develop analytical, interpersonal, and communication skills, with an emphasis placed on experiential learning through case studies and role playing.

**Prerequisites:** STAT 130M and ECON 202S

## **SCLM 442 Maritime and Supply Chain Execution and Analytics (3 Credit Hours)**

This course examines the performance metrics of the supply chain, including item tracking and visibility of the whole chain, including control tower approaches. It covers the importance of supply chain information collection, real-time data sharing and basic analytics tools to evaluate and improve the degree of execution of the supply chain and generating insights. Topics include monitoring supply chain processes, end-to-end visibility, collaborative supply chain networks, data integration, and data visualization.

**Prerequisites:** STAT 130M and MSCM 441

## **SCLM 443 Building Sustainable Supply Chains (3 Credit Hours)**

This course examines the environmental impact of supply chain activities, including environmental measurements and strategies to achieve carbon neutrality. Topics include green network distribution, sustainable sourcing operations, and circular supply chains.

**Prerequisites:** Junior standing

**SCLM 450 Advanced Maritime and Supply Chain Technology (3 Credit Hours)**

This course examines the role of technology within the supply chain and how these technologies can be used to improve supply chain performance. Topics include AI, blockchain and smart contracts, IoT and digital twins, Large Language models (LLM), automation and robotics, digital supply chain transformation, machine learning in supply chain, anti-hacking technologies, autonomous vehicles, and additive manufacturing, among others.

**Prerequisites:** Junior standing

No Graduate courses found.