Logistics Competency-Based Education

LOGI 1000 Introduction to Logistics
Course Competencies (CC)
1. Design a global supply chain network that includes location analysis, inventory positioning and transportation mode selection.
2. Develop an exponential smoothing forecast for a one-year period and calculate forecasting errors including mean squared error, mean absolute deviation, and mean absolute percent error.
3. Calculate the cost of a stockout, including backorder costs, cost of lost sales, and cost of lost customers, and identify the appropriate level of inventory that should be held as safety stock.
4. Classify inventory using the ABC classification method.
5. Perform a profitability analysis on a specific customer base using a cost-to-serve model, segment the customers based on profitability, and identify the product and service package for each segment.
6. Design a sustainable global supply chain network.

LOGI 1010 Transportation Management
Course Competencies (CC)
1. Create a portfolio of transportation performance management tools that ensures the safe, timely and cost-efficient delivery of products.
2. Calculate the costs of truckload and less-than-truckload freight moves.
3. Perform a SWOT analysis of the five modes of transportation: air, rail, ocean, trucking, and pipeline.
4. Design an effective and cost-efficient intermodal transportation strategy based on product characteristics, locations and budget constraints.
5. Create a risk management strategy plan based on the identification and analysis of transportation risks.
6. Identify and analyze the benefits and costs of governmental regulation of the transportation industry.
7. Propose a solution to the economic and competitive challenges posed by the deterioration of transportation infrastructure and the threat to the viability of major modes of transportation.

LOGI 1030 Warehouse & Inventory Management
Course Competencies (CC)
1. Identify the different types of warehouses and explain their importance to supply chains.
2. Analyze the different warehouse functional processes and explain how they can be optimized to increase efficiency.
3. Design a warehouse layout that increases throughput and productivity, decreases travel time, and maximizes space utilization.
4. Utilize an effective inventory control system that determines the most efficient inventory levels to maintain for maximum profitability.
5. Identify safety and security risks in warehouses and explain solutions to mitigate those risks.
6. Describe the three phases of customer service and identify the skills needed to build successful warehouse relationships.
7. Create a solution for a more sustainable warehouse that focuses on the triple bottom line: profit, planet, and people.

LOGI 2010 Supply Chain Technology
Course Competencies (CC)
1. Describe the role of data management systems in modern organizations, focusing on how these systems facilitate effective and efficient supply chain operations.
2. Identify the core functionality that should be included in a WMS (Warehouse Management System) and discuss the challenges and benefits of implementing a WMS.
3. Explain how robotics, automation, and voice technology are utilized in distribution centers and logistics hubs.
4. Discuss how emerging technologies, such as the Internet of Things and blockchain, are improving transportation and logistics operations.
5. Describe AI (Artificial Intelligence) and explain how it can be leveraged to minimize supply chain disruptions.
6. Discuss the concept of total cost of ownership (TCO) and why it's so important to an organization.

LOGI 2020 International Transportation & Logistics
Course Competencies (CC)
1. Identify and explain the factors leading to the exponential growth of international trade.
2. Determine the optimal method for an exporter to enter a particular market based on the product and country involved.
3. Select and justify the optimal Incoterms rule for a given product, exporter, and importer.
4. Describe the different types of insurance and commercial documents used in international logistics and explain their importance.
5. Compare the advantages and disadvantages of international transportation modes and choose the optimal method of transport based on the type of product and the destination.
6. Discuss the challenges and skills required for specialized international logistics, including refrigerated goods transportation, specialized packaging, and hazardous materials transport.
7. Explain the importance of implementing international logistics security programs and customs clearance processes.

LOGI 2040 Purchasing Principles
Course Competencies (CC)
1. Conduct a Spend Analysis and develop a supply management strategy.
2. Create a purchasing policy statement that includes diversity, environmental and social responsibility initiatives.
3. Design an organizational structure that aligns with the organization's value-added strategies.
4. Perform a supplier evaluation and discuss the benefits of certifying suppliers.
5. Discuss whether globalization and the subsequent growth in worldwide sourcing will have a positive or negative effect over the long run in the United States.
6. Perform a break-even analysis and describe the phases of project management.
7. Develop a negotiation strategy that includes at least two ethical negotiation tactics.

BUSN 1360 Software Application for Business
Course Competencies (CC)
1. Demonstrate basic computer skills such as downloading, creating and organizing different types of files.
2. Create, edit, format and save a Word document.
3. Create, edit, format and save an Excel workbook.
4. Create, edit, format and save a PowerPoint presentation.