Tennessee CTE

Supply Chain Management II

Occupational Safety

1 **Create a safety procedures manual for new employees working in a warehouse facility. Outline in the manual the personal and environmental safety practices associated with the appropriate handling and storage methods of materials in accordance with local, state, and federal safety and environmental regulations.** 1

- a Include employee responsibilities and protocols for adhering to regulations, Occupational Safety & Health Administration (OSHA) policies regarding reporting of accidents and observed hazards, and emergency response procedures. 1.A
- b Include information on how to interpret Material Safety Data Sheets (MSDS) to determine any hazards related to materials handling. 1.B
- c Include the appropriate signs and symbols that must be used to identify hazardous materials within warehouses and during transportation of the materials. 1.C

2 **Prepare and deliver a safety demonstration on the use of a specific piece of safety equipment or personal protective equipment (PPE).** 2

Communications and Professionalism

3 **Practice effective verbal, nonverbal, written, and electronic communication skills for working with customers, employees, dispatchers, wholesalers, and retailers. Demonstrate the ability to listen attentively, speak courteously and respectfully, discuss client ideas/vision, resolve conflicts, and respond to customer objections or complaints to the customer's satisfaction.** 3

4 **Collect Codes of Ethics from various transportation, distribution, and logistics-related professional organizations and/or companies, identifying areas of commonality. Analyze what these statements say about the work culture at a particular organization and pinpoint company values that resonate with one's own. Discuss how one would look for evidence of positive values when conducting a job search. Synthesize principles from the codes investigated to create a personal code of ethics to be included in a career portfolio compiled throughout the course.** 4

5 **Research job descriptions, career information, and online job boards to identify desirable employability skills and character traits for professionals working in the area of supply chain management. Compile a class list of those skills and attributes. For each item on the class list, define the characteristic, state why it is important for people working in the field, and list at least two ways to build that skill. Possible skills include, but are not limited to:** 5

- collaboration, 5.A
- honesty, 5.B

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c reliability, 5.C

d communication, 5.D

e responsibility, 5.E

f problem-solving, 5.F

g ability to work under pressure, 5.G

h flexibility/adaptability, 5.H

i workplace etiquette, 5.I

j leadership, and 5.J

k cross-cultural/diversity and inclusion. 5.K

6 **Role play two parties within a supply chain channel and negotiate terms of agreement given a specific scenario applicable to real-world supply chain obstacles.** 6

Distribution and Logistics Technology

7 **Demonstrate proficiency with Microsoft Office programs by using them to complete class assignments including writing papers, making presentations for various stakeholders (i.e. peers vs. executives), solving problems, keeping records, and managing data.** 7

8 **Research the different applications of computers and programmable controllers in managing distribution and logistics operations. Find examples of the software and technology used for those applications. Create a catalog sorted by type of application that includes the following:** 8

a A generic description of the purpose of each type of software/technology included. Possible categories to include are electronic commerce (e-commerce), barcode software, enterprise resource planning (ERP), distribution resource planning (DRP), a people process (such as SIOP), and electronic data interchange (EDI). 8.A

b An entry for each specific software/technology that falls in the application category, which includes graphics, product description, key features, best uses, and a link to the product website. 8.B

c A description of how each software plays into short- and long-term distribution and logistics decision making. 8.C

9 **Write an explanatory paper describing the benefits of having all of an organization's software programs integrated so that information is only entered once. Cite evidence from case studies, articles, and other sources.** 9

Warehousing Management

10 **Gather information from field visits, texts, and personal communications with business representatives to create layout plans for processing incoming and outgoing, cross-docking, and storage of products. Provide a sketch of the shipping and receiving area and write out a standard operating procedure for each.** 10

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	11	**Create a flow chart for the processing of incoming goods and materials using standardized industry protocols and procedures. Include processes for dealing with damaged, incorrect, and incomplete orders.** 11
	12	**Simulate the work of a warehouse manager or logistician by planning for the shipment of a product. Given a set of constraints, such as a specified timetable, destination, quantity, or other factor, determine the number of pallets needed and assign dock doors to accommodate the appropriate number of loads.** 12
	13	**Develop a written profile of how a local business coordinates and controls the order cycle and associated information systems of scheduling, cost analysis, documentation confirmation, packing lists, MSDS, product seals, packaging types, packaging labels, and routing issues. Include a description of the performance metrics used to monitor the quality, quantity, cost, and efficiency of the movement and storage of goods.** 13
	14	**Apply skills learned in Supply Chain Management courses to analyze a case study in which the supply chain for a particular product or company was disrupted. In a written paper or presentation, describe what went wrong and how management addressed the problem. Discuss whether or not the issue was resolved and the impact it had on either the supply chain or the industry as a whole. For example, analyze the 2002 Long Beach Port Strike and demonstrate through graphic representations and narrative writing how the strike impacted a range of manufacturers, retailers, and consumers in multiple locations.** 14
Supply Chain Efficiency	15	**Select an existing business that has an international supply chain. Create a visual representation of its components and, where possible, the business and government entities contributing to the supply chain. Applying knowledge of regulations, trade laws, cost of handling and transporting procedures, and supply chain managerial decision making, redesign the chosen business's supply chain to make it more efficient. Defend recommendations.** 15
	16	**Using an existing Tennessee retail operation, design transportation delivery routes to a minimum of five in-state locations. Include instructions on how to pack the truck. Design routes in such a way that costs are minimized. Incorporating an Excel spreadsheet, compare more than one route option for cost effectiveness.** 16
	17	**Investigate the use of last mile strategies in supply chain management. Compare inventory deployment, response/delivery time constraints, product return processing, and modes of deliveries for last mile and traditional supply chains. Alter a traditional supply chain into a last mile supply chain for an existing product. Present the ramifications of the change through graphs, charts, spreadsheets, maps, and written analysis.** 17
Capstone Project	18	**Plan a distribution center. In a written plan complete with accompanying graphic illustrations, charts, and/or tables:** 18

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a Select a location for the center and indicate on a map the service area for the distribution center. 18.A

b Using online mapping applications, identify businesses within the area that could be potential customers. 18.B

c Determine the type of distribution center to build based on potential customers—for example, a retail distribution center, a service parts distribution center, a catalog or e-commerce distribution center, or a 3PL (3rd party) distribution center. 18.C

d Include a brief description of how each of the following operations will be handled at the distribution center: dock operations, receiving operations, storage operations, picking operations, packaging operations, shipping operations, and processing returns. 18.D

e Evaluate possible material handling and storage equipment for use in the distribution center and assess when and where multiple warehouses and distribution centers should be utilized. 18.E

f Investigate the modes of transportation to be used to ship materials and develop guidelines for when each should be used. Consider truck, rail, air transport, maritime transport, intermodal, and outsourcing as methods of moving product. 18.F

g Develop clearly defined and measurable metrics to assess progress, and supply sample cost and revenue projections based on specified inventory, overhead, variable costs, and other inputs. 18.G

Career Portfolio

19 **Compile important artifacts that represent professional and personal skill attainment to create a career portfolio. Develop a plan to distribute the electronic portfolio as part of a career job search and/or admission to a postsecondary program. Portfolio items may include:** 19

a attainment of technical skill competencies, licensures or certifications, recognitions, awards, and scholarships; 19.A

b documentation of extended learning experiences, such as community service, professional organizations, or internships; 19.B

c abstract of technical competencies mastered during the practicum; 19.C

d resume; 19.D

e examples of best work; and 19.E

f other artifacts compiled in previous courses. 19.F