TN Department of Education | College, Career and Technical Education

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Supply Chain Management Practicum

Primary Career Cluster:	Marketing, Distribution & Logistics
Course Contact:	CTE.Standards@tn.gov
Course Code(s):	C31H##
Prerequisite(s):	Two credits in the *Supply Chain* program of study
Credit:	1
Grade Level:	11-12
Focused Elective Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other *Marketing* courses.
POS Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition, when taken in sequence in an approved program of study.
Programs of Study and Sequence:	This is a capstone course in the *Supply Chain Management* program of study.
Aligned Student Organization(s):	DECA: http://www.decatn.org FBLA: http://www.fblatn.org
Coordinating Work-Based Learning:	Teachers who hold an active WBL certificate may offer placement for credit when the requirements of the state board's WBL Framework and the Department's WBL Policy Guide are met. For information, visit https://www.tn.gov/content/tn/education/career-and-technical-education/work-based-learning.html.
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/career-and-technical-education/student-industry-certification.html.
Teacher Endorsement(s):	030, 035, 039, 052, 054, 152, 153, 158, 202, 204, 311, 430, 435, 436, 471, 472, 474, 475, 476, 503, 776, 952, 953, 958
Required Teacher Certifications/Training:	None
Teacher Resources:	https://www.tn.gov/education/career-and-technical-education/career-clusters/cte-cluster-marketing.html. Best for All Central: https://bestforall.tnedu.gov/

Course-at-a-Glance

CTE courses provide students with an opportunity to develop specific academic, technical, and 21st century skills necessary to be successful in career and in life. In pursuit of ensuring every student in Tennessee achieves this level of success, we begin with rigorous course standards which feed into intentionally designed programs of study.

Students engage in industry relevant content through general education integration and experiences such as career & technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry standard content and technology, solve industry-based problems, meaningfully interact with industry professionals and use/produce industry specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom

CTSOs are a great resource to put classroom learning into real-life experiences for your students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course, note this is not an exhaustive list.

- Participate in CTSO Fall Leadership Conference, DECA and FBLA Fall Leadership Camps, FBLA Regional and State Leadership Conferences, and DECA Emerging Leader Summit to engage with peers by demonstrating logical thought processes and developing industry specific skills that involve teamwork and project management
- Participate in conferences that promote career development such as DECA Career Pathways and Career Development Conferences
- Participate in FBLA career competitive events that highlight career development, including developing an electronic career portfolio, interviewing skills, career exploration, and crafting an elevator speech
- Participate in DECA competitive events such as Integrated Marketing Campaign – Event, Product, and/or Service, Marketing Communications Series, Marketing Management Team Decision Making, and Principles of Marketing
- Participate in FBLA competitive events such as Management Information Systems, Management Decision Making, Critical Thinking, Organizational Leadership, Spreadsheet Applications, and Supply Chain Management

For more ideas and information, visit Tennessee DECA at https://www.decatn.org/ and Tennessee FLBA at https://www.fblatn.org/.

Using Work-based Learning (WBL) in Your Classroom

Sustained and coordinated activities that relate to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.

- **Standards 1.1-1.4** | Compensated internship in the supply chain industry connected to curriculum for students to develop job skills and job materials.
- **Standards 2.1-2.3** | On-the-job training in the supply chain industry for students to develop the necessary skills and knowledge to launch a career in supply chain.
- **Standard 3.1** | On-the-job training in the supply chain industry for students to learn about personal and environmental safety practices used in the industry.
- **Standards 4.1-4.3** | Compensated internship and on-the-job training in the supply chain industry.

- **Standard 5.2** | On-the-job training in the supply chain industry for students to learn and practice using relevant technology, equipment, and software in the supply chain industry.
- **Standards 6.1-6.5** | On-the-job training in the supply chain industry for students to gain expertise in warehousing management, including warehousing layout, processing of incoming goods and products, and supply chain disruptions.
- **Standards 7.1-7.2** | On-the-job training in the supply chain industry for students to gain experience understanding and identifying the elements of supply chain efficiency, including regulations, trade laws, and transportation delivery routes.
- **Standard 8.1** | On-the-job training in the supply chain industry for students to acquire the necessary job experience and materials to advance their careers.

Course Description

Supply Chain Management Practicum is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous Supply Chain courses within an authentic business setting. Practicum activities can take place around student-led startups under the supervision of the instructor or in collaboration with a local business incubator. The standards in this course can also be used to promote student participation in a work-based learning (WBL) experience through an internship or other off-campus arrangement. Upon completion of the practicum, proficient students will be prepared to enter the workforce in an entry-level supply chain position or continue their study at the postsecondary level.

Course Requirements

This capstone course aligns with the requirements of the Work-Based Learning Framework (established in state board policy), the department's Work-Based Learning Policy Guide, and state and federal Child Labor Law. As such, the following components are course requirements:

Course Standards

1. Internship

1.1 Work-Based Learning Internship Experience: Participate in a work-based learning internship experience to **develop, practice, and demonstrate skills** outlined in the standards below and in previous courses in this program of study. An internship should follow current Tennessee work-based learning guidelines as appropriate. Skills developed and practiced in this practicum include:

a. Professionalism and work ethic
b. Leadership and management skills
c. Occupational safety skills
d. Informational management skills
e. Project development and management
f. Supply chain policies and procedures

1.2 Internship Experience and Course Content: Document internship activities. Draw **connections between the experience and course content**, thoughtfully reflecting on:

a. Acquired leadership skills
b. Problem-solving techniques and decision-making skills
c. Team member participation in a learning environment
d. Personal career development

1.3 Personal and Professional Growth: Upon conclusion of the internship, **reflect** on the internship experience and next steps for **personal and professional growth**, showcasing highlights, challenges, and lessons learned from the internship. Students should emphasize instances in which they participated in an **actual problem-solving scenario** as part of their internship placement and how the problem required them to apply knowledge learned in CTE courses.

1.4 Personalized Learning Plan: Develop a Personalized Learning Plan (PLP) that identifies **long-term goals**, demonstrates how the Work-Based Learning (WBL) experience aligns with their elective focus and/or high school plan of study, addresses how the student plans to **meet and demonstrate course standards**, and addresses **employability skill attainment** in the following areas:

a. Application of academic and technical knowledge and skills (embedded in course standards)
b. Career knowledge and navigation skills, 21st Century learning and innovation skills
c. Personal and social skills

2. Launching a Career in Supply Chain

2.1 Work-Based Learning Placement Company Profile: Produce an **in-depth profile of the WBL placement company**, using specific textual evidence from the company's literature, conduct interviews, and/or analyze press coverage (if available) to summarize the following:

a. Mission and history of the organization
b. Headquarters and organizational structure
c. Products or services provided
d. Marketing/branding strategy
e. Profit model
f. Website and contact information
g. Components of supply chain channel

2.2 Job Application and Mock Job Interview: Complete an **authentic job application** as part of a career search or work-based learning experience and participate in a **mock job interview**. Prior to the interview, update a **personal resume**, research **tips on dress and grooming**, most commonly asked **interview questions**, appropriate **conduct during an interview**, and recommended **follow-up procedure**. Following the interview, write a **thank you letter** to the interviewer in a written or email format.

2.3 Supply Chain Constraints and Opportunities: Synthesize the most recent information on interest rates, consumer spending, market competition, regulation, investment activity, and other economic data to identify the potential **constraints and opportunities** for the WBL placement company.

3. Occupational Safety

3.1 Personal and Environmental Safety Practices: Demonstrate the ability to comply with **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.

a. Adhere to responsibilities, regulations, and Occupational Safety & Health Administration (OSHA) policies regarding reporting of accidents, observed hazards, and emergency response procedures.

b. Interpret Material Safety Data Sheets (MSDS) to determine any hazards related to materials handled. Use appropriate signs and symbols to identify hazardous materials within warehouses and during transportation of the materials.
c. Maintain a portfolio record of written safety examinations and equipment examination for which the student has passed an operational checkout by the instructor.
d. Identify dangerous goods and be able to discuss how they influence warehouse and transportation decisions and determine the appropriate corrective actions if faced with a hazardous situation as outlined by the *Emergency Response Guidebook* published by the U.S. Department of Transportation.

4. Communications and Professionalism

4.1 Professional Communication: Practice **effective verbal, nonverbal, written, and electronic communication skills** for working with customers, employees, dispatchers, wholesalers, and retailers by demonstrating 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.

4.2 Code of Ethics and Workplace Climate: Collect Codes of Ethics from the work-based learning placement and compare what they say about the **work culture** at the particular organization to the company's actual workplace climate. Use this analysis to create a **personal code of ethics**.

4.3 Company Organizational Chart and Job Descriptions: Research the **organizational chart and job descriptions** for each of the positions within the work-based learning placement and identify desirable **employability skills** and **character traits** for professionals working in that position, including specific **technical skills** as well as **soft skills**.

5. Distribution and Logistics Technology

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

5.2 Distribution and Logistics Technology: Identify the various **forms of technology** in the work-based learning environment, organize each identified piece of technology into equipment or software, and **catalog technology applications** with the following information:
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), transportation management systems (TMS), and electronic data interchange (EDI).

b. An entry for each specific software/technology that falls in the application category, including graphics, product description, key features, best uses, and a link to the product website.
c. A description of how each piece of technology plays into short- and long-term distribution and logistics decision making.

5.3 Software Programs: Analyze the organization's **software programs,** the extent to which they are **integrated into the organization**, and their effect on **efficiency of data tracking**.

6. Warehousing Management

6.1 Warehouse Layout: Create a layout depiction for the work-based learning placement's processing of 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.

6.2 Process Flow Chart: Create a **process flow chart** for the **incoming goods and materials** used at the work-based learning placement, including processes for dealing with damaged, incorrect, and incomplete orders.

6.3 Product Shipment and Planning Processes: **Job shadow or interview** a warehouse manager or logistician and assess how they **plan for the shipment of a product**. Given a set of constraints, such as a specified timetable, destination, quantity, or other factors, determine how to **calculate the number of pallets** needed and assignment of dock doors to accommodate the appropriate number of loads.

6.4 Order Cycle and Associated Information Systems: Analyze how the **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.

6.5 Supply Chain Disruptions: Investigate an instance where **a problem within the supply chain** arose at the business—describe what went wrong, how management addressed the problem, whether or not the issue was resolved, and its effect on either the supply chain or the industry as a whole.

7. Supply Chain Efficiency

7.1 Components of Supply Chain: For the work-based learning placement, create a **visual representation of its supply chain 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, identify **areas of the supply chain to redesign to make it more efficient**.

7.2 Transportation Delivery Routes: Review the company's transportation delivery routes to multiple locations, outlining the **modes of transportation** used for imports, domestic inbound, outbound deliveries, and/or exports. Analyze **routes for cost effectiveness** and the advantages and disadvantages of each mode of transportation.

8. Portfolio

8.1 Career Portfolio: Create a portfolio, or similar collection of work, that illustrates **mastery of skills and knowledge** outlined in the previous courses and applied in the practicum. The portfolio should reflect thoughtful assessment and evaluation of the progression of work involving the application of steps of the entrepreneurial or business acquisition process. The following documents will reside in the student's portfolio:

a. Career and professional development plan
b. Resume
c. List of responsibilities undertaken through the course
d. Examples of business plan and supporting materials developed and used during the course
e. Sources of support, including mentors, financial, in-kind, and other
f. Description of technology used, with examples if appropriate
g. Periodic journal entries reflecting on tasks and activities
h. Feedback from instructor and/or supervisor based on observations

Standards Alignment Notes

*References to other standards include:

- P21: Partnership for 21st Century Skills Framework for 21st Century Learning
    - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.