

INVENTORY MANAGEMENT UNIT

**Course**

Supply Chain Management I

**Objectives**

* Students will describe the tradeoffs that occur between transportation and inventory costs and use that info to determine most cost-effective methods of transportation.
* Students will apply the concepts of Just-in-Time, lean dynamics, and Kanban systems to inventory and transportation.
* Students will calculate various types of costs associated with inventory and methods to optimize profit.
* Students will perform inventory calculations and research forecasting models.

**TN CCTE State Standards**

**Essential Questions**

* How does a company determine how much inventory to hold?
* What are the tradeoffs of holding inventory and minimizing transportation costs? Vice Versa?
* How does running “lean” aid in efficient production, waste reduction, and optimization of profits?
* How can knowing costs for various parts of the supply chain aid in optimizing profit?
* What are the benefits of using forecasting models to minimize inventory and optimize profits?

**Duration**

4 weeks

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| ACTIVITIES | | | |
| **Assignment** | **Due**  **Date** | **Date Completed** | **Grade** |
| Inventory Management PPT |  |  |  |
| Reading: *How Amazon is Changing Supply Chain* |  |  |  |
| Activity: Cycle Counting Practice |  |  |  |
| Activity: Stock Handling and Inventory Control |  |  |  |
| Activity: Completing a Receiving Record |  |  |  |
| Project: Create Your Own QR Code |  |  |  |
| Case Study: A Supply Chain Makeover for Sephora |  |  |  |
| Activity: Reorder Point Calculations Worksheet |  |  |  |
| Activity: Bullwhip Effect |  |  |  |
| Activity: Inventory Management Math |  |  |  |
| Quiz: Inventory Management Math Quiz |  |  |  |
| Project: Nike Inventory Allocation |  |  |  |
| Project: Eliminate Waste at Cordova High School |  |  |  |
| Reading: *JIT at Arnold Palmer Hospital* |  |  |  |
| Activity: Let’s Make Pizza with Kanban |  |  |  |
| Case Study: Toyota Lean Production |  |  |  |
| Activity: Demand Forecasting Worksheet |  |  |  |
| Unit Exam: Inventory Management |  |  |  |

**\* All activities and PowerPoint are located on my website (bkavass.weebly.com) \***