September 2021 **TABLE OF CONTENTS** SUPPLY CHAIN WAREHOUSING CERTIFICATE Developed by ASCM in partnership with PROLOGIS®

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1. Warehousing and Logistics Overview

This course introduces global supply chains and the movement of products and materials across businesses, geographies and distribution centers.

By the end of this course, you will be able to:

- Define a supply chain
- Understand the logistics life cycle and the role it plays in business
- Describe and classify the role of the distribution center

2. Functions Within Warehousing and Logistics Companies

This course explains the workings of a warehouse and a distribution center.

By the end of this course, you will be able to:

- Describe the high-level material flow at a warehouse and a distribution center
- Identify the types of reports that warehouse supervisors use to organize and manage work
- Understand the types of performance metrics used to measure the success of a facility in the warehousing and distribution industry

3. Jobs Within Warehousing and Logistics Companies

This course describes the various jobs within a warehousing and logistics company.

By the end of this course, you will be able to:

- Describe the responsibilities of key roles within warehousing and logistics companies
- Identify the various skills required to perform these roles
- Describe the performance metrics for each role and gain insight on salary expectations

4. Warehousing and Distribution: Strategy and Execution

This course describes the workings of the warehouse and distribution industry, which includes the role these functions play in developing business strategy planning work and executing effectively to meet the needs of the customer.

- List the steps of logistics strategy development and planning process
- Understand the role of planning in a supply chain
- Identify the differences between a warehouse and a distribution center and how they can work together to help execute a company's business strategy

5. Operating a Safe Workplace Environment

This course outlines safety principles, techniques and procedures for safety while working in the warehousing and distribution industry.

By the end of this course, you will be able to:

- Explain the importance and role of federal agencies regarding the rules of a safe work environment
- Understand what makes for a safe work environment and describe the techniques and practices needed
- Explain the importance of preventative and emergency procedures including common practices of fire and electrical safety

6. Quality Control Principles

This course provides an overview of what quality control means for the supply chain.

By the end of this course, you will be able to:

- Understand what quality control means and its importance for and explain supply chain
- Explain the key elements of quality control and name the types of quality control systems
- List nonconforming materials and explain their role in quality control

7. Material Handling Equipment

This course examines different types of handling equipment and the role of this equipment in warehousing and distribution centers. It also describes the different types of manually-operated equipment, powered equipment, and automated systems used in distribution centers.

By the end of this course, you will be able to:

- Explain the role of material handling equipment in distribution centers
- Compare types of manually operated equipment, industrial forklifts and lift trucks, dock equipment, and conveyors
- Identify different types of automated systems

8. Safe Material Handling and Equipment Operation

This course provides an overview of the basic safety practices regarding materials handling and maintenance, as well as the use of personal protective equipment (PPE).

- Identify safety issues related to manual material handling and explain the purpose and format of sales and operations planning (SOP)
- Identify the physical risk factors in manual material handling and how to use PPE
- Understand the functions of safety checks, maintenance of equipment, and different types of maintenance procedures

9. Creating a Secure Workplace Environment

This course examines threats to supply chain and security measures needed to mitigate them.

By the end of this course, you will be able to:

- Recognize threats and learn how to protect your supply chain
- Describe the major security programs that companies must follow when importing or exporting goods to or from the U.S.

10. Introduction to Logistics

This course introduces logistics and it's expanded role within the warehousing and distribution industry.

By the end of this course, you will be able to:

- Define the types of business processes in which logistics improves and the main tools used to drive these improvements
- Describe how logistics helps improve customer relationships and operational efficiency within the warehousing and distribution industry

11. Principles of Material Flow (Part 1)

This course provides an overview of material flow and handling as well as covers the first two principles of material flow in a supply chain.

By the end of this course, you will be able to:

- Understand material flow
- Identify best practices in material handling
- Describe the first two principles of material flow in a supply chain

12. Principles of Material Flow (Part 2)

This course explains the five remaining principles of material flow.

By the end of this course, you will be able to:

- Understand the principles of material flow in a supply chain
- Understand the benefits of following these principles and possible repercussions if not followed

13. Computer Systems in the Warehousing and Distribution Industry

This course introduces basic computer systems and computer applications, which includes various enterprise software systems and technologies that are regularly used in the industry.

- Explain the role of computer systems in logistics
- Describe common enterprise software systems
- Describe technologies that capture logistics information

14. Measurement and Conversion

This course will provide an overview of shipping metrics and costs.

By the end of this course, you will be able to:

- Identify factors that impact shipping costs across various modes of transportation
- Convert weight and volume from U.S. standard units to metric and from metric to U.S. standard units

15. Packaging and Shipment

This course dives into the purpose of packaging and labeling and how they are used in shipping products.

By the end of this course, you will be able to:

- Describe the importance of quality assurance within the shipping function
- Explain loading and shipping processes and identify characteristics of common shipping documents

16. Order Processing

This course describes procedures for processing and fulfilling customer orders.

By the end of this course, you will be able to:

- Explain an order fulfillment cycle and how to improve order accuracy and efficiency
- Describe procedures for inspecting an order and staging products for shipment

17. Inventory Control (Part 1)

This course introduces the basics of inventory, inventory management and warehouse management systems.

By the end of this course, you will be able to:

- Define inventory and describe various types of costs related to inventory
- Explain an inventory control system, an inventory management system and a warehouse management system

18. Inventory Control (Part 2)

This course explains different ways warehousing companies can capture inventory information, secure materials in their facilities, and validate the accuracy of the inventory information they maintain. In addition, it goes over how companies keep track of inventory received and process merchandise returned by customers.

- Explain how warehouses and distribution centers manage their inventories so that they can accurately report the quantity and value of the materials they receive, store and ship to customers
- Explain how warehousing and distribution companies manage customer returns

19. Inventory and Warehouse Management (Part 1)

This course focuses on types of inventories, costs of holding inventory, and approaches for optimizing the amount of inventory on hand.

By the end of this course, you will be able to:

- Describe the various ways inventory can be categorized and the costs associated with holding inventory
- Explain how businesses optimize their inventory levels to reduce the costs of stockouts while minimizing ordering and holding costs

20. Inventory and Warehouse Management (Part 2)

This course covers the procurement process, supplier and customer relationships, and the various management systems that work together to maximize benefits to an organization.

By the end of this course, you will be able to:

- Describe the procurement process and the need to maintain good relationships with suppliers and customers
- Define different types of inventory management systems

21. Product Storage

This course explains how products are stored and processed in a warehouse, including a review of key issues that affect storage and the different types of storage methods. In addition, automated storage and retrieval systems are explained

By the end of this course, you will be able to:

- Explain how uploaded products are processed and different types of storage methods
- Identify key issues that affect products storage
- Describe an automated storage and retrieval system including advantages and disadvantages

22. Role of Transportation in the Supply Chain (Part 1)

This course introduces the role of the transportation industry in supply chain and various modes of transportation used. Also described, are the main characteristics of road and rail transportation, including the different regulatory agencies governing road and rail transportation costs and pricing of shipping materials by rail.

- Describe the role of transportation in the supply chain
- Identify the different types of motor carriers, their characteristics, and the regulatory agencies that govern their use
- Describe the characteristics, costs, and regulatory agencies that govern rail carriers

23. Role of Transportation in the Supply Chain (Part 2)

This course further explains goods transport by water, pipelines and air.

By the end of this course, you will be able to:

- Describe the types of water carriers and their advantages and disadvantages
- Understand the significance of pipelines and their advantages and disadvantages
- Describe the different types of air carriers and their characteristics, the major agencies that have regulatory authority over the air freight industry, and typical pricing strategies that are used by air freight companies

24. Evaluation of Transportation Modes

This course discusses the different modes of transportation.

By the end of this course, you will be able to:

- Explain the characteristics of each type of transportation including advantages and disadvantages of each
- Choose the best mode of shipping for a product and understand the various documents that are used for each mode of shipment

25. Dispatch and Tracking Operations (Part 1)

This course provides an overview of dispatch and tracking operations and ways of managing shipping routes.

By the end of this course, you will be able to:

- Explain the dispatch function
- Understand how to schedule and track shipments

26. Dispatch and Tracking Operations (Part 2)

This course discusses navigation technologies and the role of customs in international shipments.

By the end of this course, you will be able to:

- Identify the different navigational technologies used in the warehousing and logistics industry
- Explain several key international trade regulations and agreements
- Describe the most important export documents used by international shippers

27. Environmental Impacts of the Warehousing and Distribution Industry

This course outlines a how to make workspaces and logistical activities greener.

- Describe the different activities related to logistics of a distribution center or a warehouse and understand the environmental impact of these activities
- Explain laws and regulations that affect supply chain
- Understand the importance of physical layout and design of a distribution center impacts efficiency and environmental sustainability

28. Environmental Sustainability in the Warehousing and Distribution Industry

This course explains environmental sustainability and its importance in the warehousing and distribution industry.

By the end of this course, you will be able to:

- Explain how environment-friendly measures can decrease operating costs and benefit customers and local communities as a whole
- Describe environmental sustainability best practices
- Understand how logistics companies measure their effectiveness in being sustainable
- Follow environmentally sustainable work practices on the job

29. Lean Principles (Part 1)

This course introduces Lean and Six Sigma methodologies along with their common principles and key benefits. The course also demonstrates how these methodologies can be implemented in warehouses and distribution centers.

By the end of this course, you will be able to:

- Define Lean and Six Sigma methodologies and explain why they are used
- Describe key benefits and common terms of these methodologies
- Identify ways to implement these methodologies in the distribution and logistics industry

30. Lean Principles (Part 2)

This course provides an overview of the Lean principle and discusses the various tools for continuous improvement.

By the end of this course, you will be able to:

- Describe Kaizen, the Lean principle of continuous improvement
- Describe Plan-Do-Check-Act (PDCA) and Define, Measure, Analyze, Improve, and Control (DMAIC), the tools for continuous improvement
- Explain how Lean and Six Sigma are implemented in warehouses and distribution centers

31. Problem Solving (Part 1)

This course provides an overview of structured problem solving and covers the first two steps of the problem-solving process.

By the end of the first part, you will be able to:

- Define structured problem solving and explain when it should be used
- Describe the structured problem-solving process
- Implement structured problem-solving steps

32. Problem Solving (Part 2)

This course continues going overstructured problem solving and covers the final three steps of the problem-solving process.

By the end of the second part, you will be able to:

- Implement the final three steps of structured problem solving
- Identify situations where problem-solving may work
- Understand next steps that you can take to enhance your knowledge on the subject

About ASCM

The Association for Supply Chain Management (ASCM) is the global leader in supply chain organizational transformation, innovation and leadership. As the largest non-profit association for supply chain, ASCM is an unbiased partner, connecting companies around the world to the newest thought leadership on all aspects of supply chain. ASCM is built on a foundation of APICS certification and training spanning 60 years. Now, ASCM is driving innovation in the industry with new products, services and partnerships that enable companies to further optimize their supply chains, secure their competitive advantage and positively impact their bottom lines.

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