

# **Appendix J**

## **TRANSPORTATION, DISTRIBUTION AND LOGISTICS YOUTH APPRENTICESHIP**

### **REQUIRED SKILLS CURRICULUM UNITS 1-2**

## Core Abilities

<b>Competency (Work Tasks)</b>	<b>Performance Standards</b> What employer checks for while doing task. <b>Train YA Student on.</b> YA student will ...	<b>Learning Objectives</b> What to know/learn to do this task. <b>Content Suggested</b> for Class/Reading/On-the-Job Training:
<b>1. Apply academic knowledge</b>	<p>Read and comprehend work related materials</p> <p>Apply mathematical operations involving whole numbers, fractions, decimals, percentages, formulas and methods of measurement accurately when necessary</p> <p>Interpret charts, tables, and graphs</p>	<p><b>MATH</b></p> <p>Add, subtract, multiply, and divide whole numbers, fractions, decimals and percents</p> <p>Calculate averages, ratios, proportions, and rates</p> <p>Convert decimals to fractions, fractions to percents and vice versa</p> <p>Measure and accurately report measurements of time, temperature, length, width, height, width, perimeter, area, volume, and weight</p> <p>Use appropriate formulas</p> <p>Convert measurements correctly (e.g., English (standard) to metric)</p> <p>Interpret meaning from data</p> <p><b>ENGLISH</b></p> <p>Use standard English to compile information and prepare written reports</p> <p>Apply English language correctly (spelling, grammar, structure)</p> <p>Derive meaning from text through summarizing</p> <p>Discern meaning from written word</p> <p>Use acceptable language</p> <p>Write legibly</p> <p><b>SCIENCE</b></p> <p>Explain the key elements of the scientific process</p> <p>Define the differences in qualitative and quantitative measurements</p> <p>Compare and contrast subjective and objective information</p> <p>Discriminate between fact and opinion</p>
<b>2. Apply career knowledge</b>	Demonstrate understanding of career development in the	Explain the process for seeking employment

	<p>transportation, distribution and logistics industry</p> <p>Obtain necessary skills and knowledge to meet position requirements</p>	<p>Describe the major functions and duties of the career pathways within the Transportation, Distribution &amp; Logistics career cluster</p> <p>Discuss educational, training, and credentialing requirements for a selected job</p> <p>Research job requirements and characteristics of a selected job</p> <p>Contrast "positive" and "less positive" aspects of a selected job</p> <p>Describe opportunities for advanced training in Transportation, Distribution &amp; Logistics careers</p>
<p><b>3. Apply Transportation, Distribution &amp; Logistics industry knowledge</b></p>	<p>Demonstrate Transportation, Distribution &amp; Logistics (TDL) industry systems understanding based on current knowledge and training</p>	<p>SYSTEMS, PRINCIPLES, CONCEPTS</p> <p>Discuss common vocabulary terms used in the Transportation, Distribution &amp; Logistics (TDL) industry</p> <p>HISTORY and TRENDS</p> <p>Describe a brief history of TDL and governmental regulation</p> <p>Examine the current state and future trends in the TDL industry</p> <p>List major milestones in the TDL industry</p> <p>Describe the impact of technology on the TDL industry</p>
<p><b>4. Communicate effectively</b></p>	<p>Deliver coherent verbal messages in words that can be understood</p> <p>Use appropriate and bias-free language</p> <p>Use appropriate body language</p> <p>Listen actively to others</p> <p>Demonstrate courtesy with self-introduction</p> <p>Respond to inquiries or statements within the scope of current responsibilities and understanding</p> <p>Does not overreact in response to anger</p> <p>Record information in a timely manner</p> <p>Record written information legibly and accurately</p> <p>Organize and compile messages, technical information, and summaries accurately</p> <p>Use instant messaging, email, the Internet, printer, copier, scanner, and fax machine equipment appropriately as applicable</p> <p>Is sensitive to special, multicultural, and/or multilingual</p>	<p>GENERAL</p> <p>Compare verbal and nonverbal behaviors</p> <p>Explain how empathy and bias can be communicated verbally and non-verbally</p> <p>LISTEN</p> <p>Discuss effective and active listening skills</p> <p>Differentiate between hearing and listening</p> <p>WRITTEN</p> <p>Discern meaning from written instructions</p> <p>Write clearly to communicate written ideas</p> <p>Discuss common recording errors and how to avoid them</p> <p>CUSTOMER</p> <p>Identify internal and external customers at your facility</p> <p>Discuss steps to assess customer understanding</p> <p>Describe the steps to follow when dealing with complaints</p> <p>TOOLS</p>

	needs	<p>Describe technology used in communicating such as, telephone, texting, instant messaging (IM), computers, fax, intercom, beepers, etc.</p> <p>Explain the proper use and etiquette required for these forms of communication technology</p> <p>Review the policies and procedures for using written communication tools in your company such as IM, email, Internet, printer, copier, scanner, and/or fax</p>
<b>5. Act professionally</b>	<p>Follow oral and written instructions</p> <p>Is pleasant, courteous, and professional with coworkers and internal and external customers</p> <p>Appearance and dress are appropriate according to the requirements of the employer</p> <p>Take personal responsibility for attendance</p> <p>Is punctual</p> <p>Begin work promptly</p> <p>Organize and prioritize tasks efficiently</p> <p>Exhibit positive attitude and commitment to task at hand</p> <p>Complete assigned tasks accurately and in a timely manner</p> <p>Take responsibility for actions and decisions</p> <p>Recognize lack of knowledge and seeks help from information sources</p> <p>Evaluate work goals periodically with worksite professional</p> <p>Accept constructive criticism and apply suggestions</p> <p>Communicate safety, training, and job-specific needs</p> <p>Adhere to safety rules and regulations</p>	<p>Locate and explain written organizational policies, rules and procedures to help employees perform their jobs</p> <p>Locate and explain your company's employee manual for policies on Appearance, Breaks, Time Off, Cell Phone Use, Weather, Personal Issues, etc.</p> <p>List qualities of successful Transportation, Distribution &amp; Logistics employees</p> <p>Describe how you can demonstrate enthusiasm and commitment at the worksite</p> <p>Define initiative</p> <p>Explain ways that you can show initiative at a worksite</p> <p>Explain methods to evaluate work assignments and prioritize them</p> <p>Describe how to effectively receive feedback</p>
<b>6. Demonstrate customer service skills</b>	<p>Is knowledgeable about products and services</p> <p>Address the customer, either in person, by telephone, e-mail or other means</p> <p>Gather information about customer's needs, and customer's knowledge of products or services</p> <p>Respond to customer's comments and questions</p> <p>Solicit supervisor or co-worker support and advice when necessary to meet customer needs</p> <p>Coordinate as needed with other services to expedite</p>	<p>Define customer service</p> <p>Identify internal and external customers at your facility</p> <p>Describe how customer service affects a company's "bottom line"</p> <p>Describe standards of service</p> <p>List strategies for maximizing customer satisfaction</p> <p>Describe the functions of other departments or units to serve the customer</p> <p>Describe the steps to follow when dealing with</p>

	<p>delivery of service or product Handle complaints tactfully without insult or conflict</p>	<p>complaints Identify customer service methods to use when encountering an angry customer Review material pertaining to products and services produced by your department or company</p>
<b>7. Cooperate with others in a team setting</b>	<p>Demonstrate respect relating to people Contribute to a group with ideas, suggestions, and effort Listen and respond appropriately to team member contributions Work collaboratively with people from other backgrounds/cultures Resolve differences for the benefit of the team Complete their share of tasks necessary to complete a project</p>	<p>Explain the functions of each department or unit within the larger organization Identify roles found in teams such as leader, facilitator, recorder, etc. List effective meeting management skills Demonstrate techniques that show respect for others Describe how to effectively give and receive feedback Describe conflict resolution methods Discuss ways to participate within a team setting Explain how to interact appropriately with diverse ethnic, age, cultural, religious, and economic groups in different situations Describe how work teams coordinate work flow and help manage resources</p>
<b>8. Think critically</b>	<p>Recognize the existence of a problem Apply problem-solving steps Differentiate between fact and opinion Consider other viewpoints and perspectives Apply the principles and strategies of organized thinking Evaluate information, ideas, and problems Collect information through probing questions and research Define the problem Use techniques such as brainstorming to acquire alternative solutions Demonstrate comparison skills Make decisions based on analysis Present ideas for critical evaluation Support viewpoints with evidence Respond to problems with the appropriate level of urgency</p>	<p>Describe how to break a problem down in order to brainstorm, evaluate, and analyze possible solutions Discuss the difference between fact and opinion Discuss data collection techniques for the problem solving process Describe how to present a solution with evidence Explain ways to reach a decision by consensus Discuss methods to evaluate a solution that has been implemented</p>
<b>9. Exhibit regulatory &amp; ethical responsibilities</b>	<p>Follow all safety and worksite standards and regulations Perform legally and ethically by all local, state, and</p>	<p>GENERAL Explain the role of government in regulating the</p>

	<p>national standards</p> <p>Use instant messaging, email, the Internet, printer, copier, scanner, and fax machine equipment appropriately and correctly as applicable</p> <p>Operate within scope of authority adhering to company rules, regulations, and policies as established in employee handbook/procedures</p> <p>Comply with legal requirements for documentation</p> <p>Document work processes as required</p> <p>Record and file appropriate documents in timely manner</p> <p>Maintain confidentiality of company, customer, and co-worker information</p> <p>Document reportable incidents to worksite professional immediately, if applicable</p> <p>Receive, handle, package, and ship materials and product according to shipping laws and regulations if applicable</p>	<p>Transportation, Distribution &amp; Logistics (TDL) industry</p> <p>Compare international, national, state, and local regulators that oversee the TDL industry: Department of Transportation (DOT), Department of Commerce (DOC), Federal Aviation Administration (FAA), North American Free Trade Agreement (NAFTA), Environmental Protection Agency (EPA), Department of Natural Resources (DNR), National Transportation Safety Board (NTSB), etc.</p> <p>Identify the major TDL industry associations: American Trucking Association (ATA), Air Transportation Association (ATA), International Air transport Association (IATA), American Association of State Highway &amp; Transportation Officials (AASHTO), American Association of Port Authorities (AAPA), American Production &amp; Inventory Control Society (APICS), American Society of Transportation &amp; Logistics (ASTL), American Waterways Association (AWA), Association of American Railroads (AAR), International Maritime Organization (IMO), etc.</p> <p>Identify the management structure and employees' roles within your organization</p> <p>Describe common legal requirements that must be met in TDL facilities</p> <p>Describe your legal responsibilities, limitations, and implications for action in your professional job role</p> <p>Compare and contrast behaviors and practices that could result in liability or negligence</p> <p>Summarize the rights and responsibilities of TDL workers</p> <p>Explain what situations are reportable in TDL facilities</p> <p><b>ETHICAL</b></p> <p>Explain the difference between an ethical practice and a legal responsibility</p> <p>Identify current ethical issues common to the TDL industry</p> <p>Describe ethical work values such as confidentiality, productivity during the day, following safety standards</p> <p><b>SAFETY</b></p> <p>Define ethical and legal responsibilities for safety</p>
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		<p>procedures</p> <p>Describe the certification/license requirements to operate specific equipment</p> <p><b>RECORDS</b></p> <p>Identify the main functions of documents and documentation</p> <p>Identify the guidelines for retaining common documents</p>
<b>10. Use resources wisely</b>	<p>Follow the facility pollution/waste prevention plan</p> <p>Recycle whenever possible</p> <p>Dispose of materials appropriately</p> <p>Dispose of hazards legally and with regard to environmental impact</p>	<p>Identify current environmental issues affecting the Transportation, Distribution &amp; Logistics industry</p> <p>Define what is meant by making “green” choices</p> <p>Compare renewable and nonrenewable natural resources</p> <p>Explain the meaning of sustainable resources use</p> <p>Identify practices that contribute to sustainability</p> <p>Describe why wise use of resources at the worksite is important</p> <p>Give examples of wasteful uses of resources (unnecessary waste and duplication) at the worksite</p> <p>List materials that can be recycled</p> <p>Describe materials that require special disposal</p> <p>Explain purpose of pollution control systems</p> <p>Relate power generation to energy sources</p> <p>Compare environmental impact of energy sources (e.g., fuel cells, chemical, wind, hydro, nuclear, electric, mechanical, solar, biological)</p>
<b>11. Use basic technology</b>	<p>Use communication technology (such as pagers, radios, phone, fax, email, Internet) to access and distribute data and other information within the scope of the job</p> <p>Follow rules for proper computer and communication technology usage</p> <p>Use calculating tools such as computer, calculator, and adding machine correctly</p> <p>Enter, edit, and store data on computerized equipment according to worksite guidelines</p> <p>Verify data entry prior to data storage or equipment operation</p>	<p>Identify the parts and functions of a computer system using correct terminology including the keyboard, monitor, mouse, printer</p> <p>Point out the storage device locations on the computer such as the Hard drive, CD-ROM drive, and Portable File Storage drive, etc</p> <p>Show the appropriate connections and positioning of peripheral devices such as a mouse, keyboard, monitor, and printer</p> <p>Discuss the importance of backing up computerized files</p> <p>Compare different forms of communications technology including email, texting, word processing, spreadsheets, database, presentation software, and use of the internet to communicate, search and display information</p>

		Describe how to evaluate internet websites and information for validity and reliability Explain appropriate and inappropriate uses of email and internet while at work
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## Safety

<b>Competency (Work Tasks)</b>	<b>Performance Standards</b> What employer checks for while doing task. <b>Train YA Student on.</b> YA student will ...	<b>Learning Objectives</b> What to know/learn to do this task. <b>Content Suggested</b> for Class/Reading/On-the-Job Training:
<b>1. Follow personal safety requirements</b>	Participate in all required safety training Follow all worksite guidelines for personal safety Apply principles of proper body mechanics when necessary Report any exposures, injuries, or accidents, personal or to others, immediately, if applicable Locate and can find key information on Material Safety Data Sheets (MSDS) Handle and dispose of any hazardous materials appropriately, if applicable Operate only equipment that he/she is trained on Adhere to equipment safety standards Visually inspect equipment to ensure safety compliance and function before operation Wear the required Personal Protective Equipment (PPE) at all times as required by the worksite for specific tasks Be alert for moving equipment, machinery, and traffic	Discuss the regulatory purpose and responsibility of the Occupational Safety and Health Administration (OSHA) List your rights as a worker according to OSHA Explain the procedure to follow in case of an exposure, injury, or accident to self or to another Explain ways your company prevents accidents List engineering controls that are taken to protect workers from accidents Describe safe and unsafe work habits and their implications List safety hazards at your facility Explain potential hazards associated with blood borne pathogens Explain the ergonomic impact of work techniques Describe proper techniques for lifting loads Describe the Material Safety Data Sheet (MSDS) and its purpose Discuss the procedures of handling and disposing of hazardous material List mechanical, chemical, electrical, compressed air, and equipment safety hazards at your facility Describe your facility's chemical hygiene plan Explain how Lock Out/Tag Out procedures prevent accidents Define the Personal Protective Equipment (PPE)

		<p>required for specific tasks in your facility</p> <p>Explain the use of safety equipment such as eyeball washers and chemical safety showers and when you would use them</p> <p>Describe ways to prevent burns</p>
<p><b>2. Maintain a safe work environment</b></p>	<p>Comply with posted safety warnings and symbols</p> <p>Identify unsafe conditions and/or work habits and reports them to the worksite professional immediately, if applicable</p> <p>Help maintain a clean and safe working environment free of debris and obstacles</p> <p>Clean, organize, put away items in the work area</p> <p>Safely identify, handle, store, and use hazardous materials according to company procedure, if applicable</p> <p>Report any indications of insects or pests</p>	<p>List the major components of a facility safety program</p> <p>List the different state and federal agencies that provide regulatory oversight at your facility for personal safety, environmental safety, and equipment safety</p> <p>List accident and fire prevention techniques</p> <p>Describe posted safety warnings and symbols and what they mean</p> <p>Describe safe and unsafe work habits and their implications</p> <p>Discuss the importance of keeping the work area and tools/equipment clean</p> <p>List mechanical, electrical, and equipment safety hazards at your facility</p> <p>Discuss how to identify and report unsafe conditions in your facility</p> <p>Discuss safety procedures to prevent accidents</p> <p>Describe the requirements at your facility for safety training and auditing</p> <p>Assess need for good housekeeping practices</p> <p>List accident and fire prevention techniques</p> <p>List hazards that contribute to injury due to slips, trips, or falls</p> <p>Outline compliance requirements of sanitation and health inspections</p>
<p><b>3. Demonstrate professional role to be used in an emergency</b></p>	<p>Participate in emergency safety simulations and drills</p> <p>Outline the company's policy and procedure for worksite incidents, accidents, electrical, fire, tornado, bomb threats, robbery, hostage situations, and other emergency situations</p> <p>Identify the closest fire alarms and emergency exits in the assigned worksite area</p> <p>Identify the fire extinguishers in the assigned worksite</p>	<p>Describe the procedures in your company to report an emergency</p> <p>Review your company procedures for responding to exposures, injuries, accidents, spills, fire, tornado, bomb threat, robbery, hostage situations, etc.</p> <p>Demonstrate how to use the fire blanket and/or fire extinguisher</p> <p>Explain the evacuation plan for the worksite</p>

	<p>area</p> <p>Identify appropriate alarms and procedures for using alarms</p> <p>Contact emergency personnel according to company requirements in the event of an emergency</p> <p>Document any emergency incidents according to company requirements</p>	<p>Indicate the demeanor necessary during an emergency</p> <p>Identify methods to cope with emergency situations</p> <p>Name the resources for assistance in crimes or accidents</p> <p>Locate and explain use of first aid emergency care kits</p> <p>Detail steps to use in medical emergencies requiring First Aid, CPR, and/or Heimlich maneuver</p> <p>Locate and explain use of spill kits, if applicable to worksite</p> <p>Explain who in your facility can give first aid care in the event of an emergency</p> <p>Explain the local protocols in place with local law enforcement</p> <p>Explain the role of the Hazardous Materials (HAZMAT) team</p> <p>Detail how to access help in a robbery or terrorist situation</p> <p>Explain the use of safety equipment such as eyeball washers and chemical safety showers and when you would use them</p>
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