

MODULE CURRICULUM AND ASSESSMENT STANDARDS:

SECTION D: INTRODUCTORY LEVEL

The following pages define the curriculum and assessment standards for the introductory level of Logistics.

Introductory level modules help students build daily living skills and form the basis for further learning. Introductory modules are developed for students who have no previous experience in the strand.

Module learner expectations define the competencies a student must demonstrate to achieve success in a module. Assessment standards define the criteria and conditions to be used for assessing the competencies defined in the module learner expectations.

Specific learner expectations provide a detailed framework for instruction to help students build the competencies defined in the module learner expectations. Additional information and suggestions for instruction are provided in the Notes column; teachers may wish to use this space to record their ideas for instruction or student projects.

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MODULE LOG1010: LOGISTICS

Level: Introductory

Theme: Introduction to Logistics

Prerequisite: None

Module Description: Students identify logistics as a sector in Canada's economy, by describing related subsectors, users and providers of logistics services. Students also identify current and emerging career paths in logistics.

Module Parameters: Access to persons knowledgeable about logistics, logistics subsectors and logistics operations.

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> explain the role and significance of logistics in everyday living identify and describe: <ul style="list-style-type: none"> – subsectors of logistics – relationships among logistics subsectors explain the role of logistics in the production of a simple item to its availability and use by a satisfied customer identify and describe current and emerging career paths and opportunities within the logistics sector 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> a report outlining the logistics sector, subsectors and their relationship 	30
	<ul style="list-style-type: none"> production of a flow chart showing the logistics operations used in the production of an item to its use by a consumer 	50
	<ul style="list-style-type: none"> a chart showing career paths, opportunities and qualifications required at the different levels and in the different subsectors of logistics. <p><i>Assessment Tool</i> <i>LOG1010: Logistics Competency Profile and Assessment Checklist</i></p> <p><i>Standard</i> <i>A minimum performance rating of 1 for each applicable area of assessment</i></p>	20

MODULE LOG1010: LOGISTICS (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> demonstrate basic competencies. 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> observations of individual effort and interpersonal interaction during the learning process. <p><i>Assessment Tool</i> <i>Basic Competencies Reference Guide and any assessment tools noted above</i></p>	<p>Integrated throughout</p>

Concept	Specific Learner Expectations	Notes
<p>Logistics, Producers, Distributors and Consumers</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> define: <ul style="list-style-type: none"> logistics producers distributors consumers describe logistics subsectors including: <ul style="list-style-type: none"> warehousing and distribution traffic and transportation purchasing inventory management and control production materials movement describe why logistics is seen to be significant in everyday living. 	<p>Local and provincial telephone and business directories will provide listings under various headings.</p>
<p>From Production to Consumer</p>	<ul style="list-style-type: none"> for a selected item, identify and describe how the logistics sector and subsectors affect the production, distribution and eventual availability and use to consumers. 	<p>Select a simple product (e.g., a hamburger, a running shoe). Brainstorm logistics-related services necessary at each stage of its production to its final use.</p>
<p>Users and Suppliers</p>	<ul style="list-style-type: none"> identify and distinguish between users and suppliers of logistic services list examples of local, provincial, national and international users and suppliers of logistics services. 	

MODULE LOG1010: LOGISTICS (continued)

Concept	Specific Learner Expectations	Notes
Third-party Logistics	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • explain the term third-party logistics and provide an example of third-party logistics users and suppliers. 	
Customer Service and Satisfaction	<ul style="list-style-type: none"> • define the terms customer service and customer satisfaction • explain the importance of customer service and satisfaction in logistics • list and describe examples of customer service provided within a logistics operation • describe strategies and instruments used to assess levels of customer service and satisfaction. 	
Careers in Logistics	<ul style="list-style-type: none"> • identify and describe current and emerging career opportunities in logistics subsectors • describe abilities, qualifications and credentials that would be of value in a logistics-related career; e.g., employability skills, physical skills. 	<p>Check for logistics-related sector publications.</p> <p>Check classified and display advertisements in local and national newspapers.</p>

MODULE LOG1020: WAREHOUSE & DISTRIBUTE 1

Level: Introductory

Theme: Warehousing and Distribution

Prerequisite: LOG1010 Logistics

Module Description: Students explore warehousing and distribution systems as subsectors of logistics and participate in warehousing, materials handling systems, stock placement and documentation activities.

Module Parameters: Access to one or more logistics operations.

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> identify and describe the roles of warehousing and distribution in logistics identify, describe and demonstrate materials handling: <ul style="list-style-type: none"> – systems/processes – stock placement read, interpret and complete appropriate documentation demonstrate basic competencies. 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> the student's clarity and accuracy in: <ul style="list-style-type: none"> – reporting on role of warehousing in logistics – reporting on materials-handling processes – demonstrating appropriate materials handling procedures accuracy in selecting and completing documentation. <p><i>Assessment Tool</i> <i>LOG1020: Warehouse & Distribute 1</i> <i>Competency Profile and Assessment Checklist</i></p> <ul style="list-style-type: none"> observations of individual effort and interpersonal interaction during the learning process. <p><i>Assessment Tool</i> <i>Basic Competencies Reference Guide and any assessment tools noted above</i></p> <p><i>Standard</i> <i>A minimum performance rating of 1 for each applicable area of assessment</i></p>	<p>20</p> <p>10</p> <p>30</p> <p>40</p> <p>Integrated throughout</p>

MODULE LOG1020: WAREHOUSE & DISTRIBUTE 1 (continued)

Concept	Specific Learner Expectations	Notes
<p>Warehousing and Distribution</p> <ul style="list-style-type: none"> • Processes • Roles • Purposes • Significance 	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • identify and describe processes involved in: <ul style="list-style-type: none"> – warehousing operations – distribution operations • explain the roles of warehousing and distribution in the logistics sector • distinguish between the purposes of warehousing and the purpose of distribution • explain the significance of warehousing roles and distribution roles in the logistics process. 	
<p>Safety</p> <ul style="list-style-type: none"> • Requirements • Signs and Symbols • Hazard Reports 	<ul style="list-style-type: none"> • identify and describe general and specific safety requirements in warehousing and distribution operations • identify and demonstrate safe work practices associated with: <ul style="list-style-type: none"> – flow of materials – movement of equipment – WHMIS requirements – wearing of protective clothing/personal protective equipment • identify and interpret signs and symbols used in warehousing and distribution operations • identify potential hazards within a warehousing and distribution workplace. 	
<p>Documentation</p>	<ul style="list-style-type: none"> • identify and describe the purpose of documentation used in: <ul style="list-style-type: none"> – warehousing operations – distribution operations • distinguish among: <ul style="list-style-type: none"> – packing slips – bills of lading – advance shipment notices – distribution sheets – other available documents 	

MODULE LOG1020: WAREHOUSE & DISTRIBUTE 1 (continued)

Concept	Specific Learner Expectations	Notes
<ul style="list-style-type: none"> • Accuracy and Attention to Detail • Electronic Data Interchange (EDI) 	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • explain why accuracy and attention to detail are important when completing, reading and interpreting documents • complete appropriate documentation in: <ul style="list-style-type: none"> – warehousing situations – distribution situations • identify and explain the role and impact of technology in the generation of documentation in warehousing and distribution operations • explain the concept of Electronic Data Interchange (EDI) • demonstrate basic ability to use the computer and software. 	
<p>Materials Handling</p> <ul style="list-style-type: none"> • Stock Placement 	<ul style="list-style-type: none"> • describe and explain the concept of materials handling • identify and describe product movement and placement procedures • demonstrate safe stock handling and moving procedures. 	
<p>Career Opportunities</p>	<ul style="list-style-type: none"> • identify and describe current and emerging career opportunities specific to: <ul style="list-style-type: none"> – warehousing – distribution • identify and describe requirements for entry into a warehousing and distribution career at: <ul style="list-style-type: none"> – entry level – skilled level – supervisory level – management level. 	<p>Include physical fitness, academic, willingness to learn, teamwork, numeracy and communication requirements/abilities in discussions of requirements.</p>

MODULE LOG1030: TRAFFIC & TRANSPORT 1

Level: Introductory

Theme: Traffic and Transportation

Prerequisite: LOG1010 Logistics

Module Description: Students distinguish among modes, vehicles and vessels involved in transportation, identify the advantages and disadvantages of single mode and intermodal usages, and demonstrate basic skills relating to map reading, technology, handling equipment and handling dangerous goods.

Module Parameters: Access to logistics-related traffic and transportation operations; a driver's licence may be required.

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> • identify modes of transportation and vehicles and vessels used in each mode • differentiate and explain the advantages and disadvantages of: <ul style="list-style-type: none"> – single mode usages – intermodal usages • demonstrate: <ul style="list-style-type: none"> – map-reading skills – using technology – handling dangerous goods – handling equipment 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> • the student's ability to report on: <ul style="list-style-type: none"> – transportation modes, vehicles and vessels – single mode and intermodal usages – impact and uses on traffic and transportation • the appropriateness, quality and level of safety demonstrated when performing basic traffic and transportation functions including: <ul style="list-style-type: none"> – using related technology – handling dangerous goods – equipment handling. <p><i>Assessment Tool</i> <i>LOG1030: Traffic & Transportation 1</i> <i>Competency Profile and Assessment Checklist</i></p> <p><i>Standard</i> <i>A minimum performance rating of 1 for each applicable area of assessment</i></p>	<p>20</p> <p>10</p> <p>10</p> <p>60</p>

MODULE LOG1030: TRAFFIC & TRANSPORT 1 (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> demonstrate basic competencies. 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> observations of individual effort and interpersonal interaction during the learning process. <p><i>Assessment Tool</i> <i>Basic Competencies Reference Guide and any assessment tools noted above</i></p>	<p>Integrated throughout</p>

Concept	Specific Learner Expectations	Notes
<p>Traffic and Transportation</p> <ul style="list-style-type: none"> Modes, Vehicles and Vessels 	<p><i>The student should:</i></p> <ul style="list-style-type: none"> identify and describe the role of traffic and transportation in logistics distinguish between the concepts of traffic and transportation when used in logistics contexts explain the advantages and disadvantages of different vehicles and vessels used in the following modes of transportation: <ul style="list-style-type: none"> air; e.g., commercial, charter rail surface; e.g., commercial, contract, hotshot sea pipeline describe the advantages and disadvantages of using each of the following transportation systems: <ul style="list-style-type: none"> single mode intermodal. 	
<p>Product-specific Requirements</p>	<ul style="list-style-type: none"> list and describe product-specific transportation equipment available for a selection of products, list the: <ul style="list-style-type: none"> most appropriate mode of transportation product-specific requirements; e.g., refrigeration, speed, air ride trailers for delicate equipment other requirements; e.g., time, temperature, packing. 	

MODULE LOG1030: TRAFFIC & TRANSPORT 1 (continued)

Concept	Specific Learner Expectations	Notes
Map Reading	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • demonstrate ability to use a map to: <ul style="list-style-type: none"> – identify specific locations – trace routes – measure distances – identify key features. 	
Electronic Data Interchange (EDI) and Related Technology	<ul style="list-style-type: none"> • define and describe EDI • list examples of information that may be transmitted using EDI and related technology • use available hardware and software. 	<p>The resource, <i>EDI: Technology in Trucking</i>, is available from American Trucking Association/ Management Systems Council, 2200 Mill Road, Alexandria, VA 22314-4677. Telephone: 703-838-1721.</p>
Safety Standards	<ul style="list-style-type: none"> • identify and describe basic safety procedures, practices and standards that must be followed in each mode and for each vehicle, such as: <ul style="list-style-type: none"> – on-highway standards – off-highway standards – air/sea freight standards – customer safety standards • use personal protective equipment. 	<p>Refer to Canadian Transportation Law Reports and/or related national, provincial, municipal safety legislation and regulations.</p>
Dangerous Goods	<ul style="list-style-type: none"> • describe the range of goods identified as “dangerous goods” • describe the methods used to identify and label different dangerous goods • demonstrate safe handling of dangerous goods. 	
Career Opportunities	<ul style="list-style-type: none"> • identify and describe current and emerging career opportunities specific to traffic and transportation • identify and describe requirements for entry into a purchasing career at: <ul style="list-style-type: none"> – entry level – skilled level – supervisory level – management level. 	<p>Include as many requirements as possible; e.g.:</p> <ul style="list-style-type: none"> • academic • teamwork • communication skills • numeracy skills • ability to use technology.

MODULE LOG1040: PURCHASING 1

Level: Introductory

Theme: Introduction to Logistics

Prerequisite: LOG1010 Logistics

Module Description: Students identify the role of purchasing, distinguish between public and private purchasing activities, perform expediting activities, and provide service to internal and external customers.

Module Parameters: Access to purchasing, warehousing and distributing facility.

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<i>The student will:</i> <ul style="list-style-type: none">describe the role of purchasing and work performed by purchasers in logisticsdistinguish between public and private purchasing activitiesdifferentiate between internal and external customersdemonstrate basic competencies in:<ul style="list-style-type: none">purchasingexpeditingdata handling	<i>Assessment of student achievement should be based on:</i> <ul style="list-style-type: none">the student's clarity and accuracy in reporting on:<ul style="list-style-type: none">the role of purchasing in logisticssimilarities/differences between public and private purchasing activitiesdifferentiating between internal and external customersaccuracy and appropriateness in performing basic:<ul style="list-style-type: none">purchasingexpeditingdata handling. <p><i>Assessment Tool</i> <i>LOG1040: Purchasing 1 Competency Profile and Assessment Checklist</i></p> <p><i>Standard</i> <i>A minimum performance rating of 1 for each applicable area of assessment</i></p>	30 10 10 50

MODULE LOG1040: PURCHASING 1 (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> demonstrate basic competencies. 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> observations of individual effort and interpersonal interaction during the learning process. <p><i>Assessment Tool</i> <i>Basic Competencies Reference Guide and any assessment tools noted above</i></p>	<p>Integrated throughout</p>

Concept	Specific Learner Expectations	Notes
<p>Purchasing</p> <ul style="list-style-type: none"> Public and Private Purchasing Lines of Authority Value-added Decision Making 	<p><i>The student should:</i></p> <ul style="list-style-type: none"> identify and describe the processes involved in the purchasing subsector of logistics explain how and where purchasing fits in the logistics process distinguish between public and private purchasing activities compare and contrast the purchasing process for goods and the purchasing process for services identify and explain in chart form the line of authority for the purchase of: <ul style="list-style-type: none"> goods services explain how and why purchasing decisions can add value/profitability to the logistics process. 	
<ul style="list-style-type: none"> Centralized/Decentralized Procedures Internal/External Customers Customer Satisfaction 	<ul style="list-style-type: none"> identify differences and similarities between centralized purchasing procedures and decentralized purchasing procedures distinguish between internal and external customers from a purchasing perspective explain why customer satisfaction is an important factor in purchasing decisions. 	

MODULE LOG1040: PURCHASING 1 (continued)

Concept	Specific Learner Expectations	Notes
<p>Expediting</p> <ul style="list-style-type: none"> • Necessity 	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • for a given item, explain the production process(es) • demonstrate basic expediting procedures including: <ul style="list-style-type: none"> – tracking progress and time of arrival of specific orders – consulting with suppliers – anticipating problems – having a contingency plan – ensuring delivery of goods • explain the concept of “necessity” and how it relates to the purchasing process. 	
<p>Career Opportunities</p>	<ul style="list-style-type: none"> • identify and describe current and emerging career opportunities specific to purchasing • identify and describe requirements for entry into a purchasing career at: <ul style="list-style-type: none"> – entry level – skilled level – supervisory level – management level. 	<p>Include as many requirements as possible; e.g.:</p> <ul style="list-style-type: none"> • academic • teamwork • communication skills • numeracy skills • ability to use technology.

