

MODULE CURRICULUM AND ASSESSMENT STANDARDS:

SECTION F: ADVANCED LEVEL

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

Advanced level modules demand a higher level of expertise and help prepare students for entry into the workplace or a related post-secondary program.

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MODULE LOG3010: WAREHOUSE & DISTRIBUTE 3

Level: Advanced

Theme: Warehousing and Distribution

Prerequisite: LOG2010 Warehouse & Distribute 2

Module Description: Students develop an understanding and competencies relating to stock movement and placement procedures, product tracking and the use of automated warehouse systems. Students also develop competencies in labelling, containerizing and palletizing items.

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"> • demonstrate an understanding of: <ul style="list-style-type: none"> – stock movement and placement procedures and practices – product tracking – equipment operations standards – automated warehouse systems • demonstrate competencies in: <ul style="list-style-type: none"> – labelling – containerization – palletizing 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> • identifying and explaining: <ul style="list-style-type: none"> – stock movement and placement – product tracking services, procedures and technology – internal and external warehouse equipment operations standards – advantages and disadvantages of automated systems • competency in handling/operating: <ul style="list-style-type: none"> – labelling equipment – containers – pallets. <p><i>Assessment Tool</i> <i>LOG3010: Warehouse & Distribute 3 Competency Profile and Assessment Checklist</i></p> <p><i>Standard</i> <i>A minimum performance rating of 3 for each applicable area of assessment</i></p>	<p>40</p> <p>20</p> <p>20</p> <p>20</p>

MODULE LOG3010: WAREHOUSE & DISTRIBUTE 3 (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>Stock Movement and Placement</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> identify and describe stock movement and placement procedures and practices identify and correct errors in documentation regularly review stocks and flow anticipate product movement issues, develop contingency plans and implement solutions (where appropriate) demonstrate safe product movement and placement procedures and practices. 	
<p>Product Tracking</p>	<ul style="list-style-type: none"> identify and describe product tracking services identify and describe various tracking procedures demonstrate ability to use tracking technology; e.g.: <ul style="list-style-type: none"> bar codes/reader/scanner microfiche CD ROM monitors visual readers locator systems. 	
<p>Equipment Operations Standards</p>	<ul style="list-style-type: none"> identify and describe warehouse equipment operations standards; e.g.: <ul style="list-style-type: none"> internal standards (department, company) external standards (governmental, national). 	

MODULE LOG3010: WAREHOUSE & DISTRIBUTE 3 (continued)

Concept	Specific Learner Expectations	Notes
Automated Warehouse Systems	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • explain the advantages and disadvantages of using automated warehouse systems • demonstrate ability to safely use automated systems; e.g.: <ul style="list-style-type: none"> – conveyor systems – pickers – scaling/weighing devices – storage and retrieval systems. 	
Labelling	<ul style="list-style-type: none"> • identify product and/or shipment labelling needs • demonstrate ability to read, interpret, select and affix appropriate labels; e.g.: <ul style="list-style-type: none"> – shipping instructions – content identification – WHMIS needs – quantity, mass – handling instructions; e.g.: <i>fragile, This side up.</i> 	
Containers	<ul style="list-style-type: none"> • explain purpose of containerization • demonstrate ability to safely operate wrapping equipment and materials; e.g.: <ul style="list-style-type: none"> – shrink wrap – nets – nylons • demonstrate ability to prepare containers for shipment; e.g.: <ul style="list-style-type: none"> – label – wrap. 	
Pallets	<ul style="list-style-type: none"> • explain purpose of palletizing items; e.g.: <ul style="list-style-type: none"> – warehouse storage – ease of handling (manual, automated) – outgoing and incoming shipments. 	

MODULE LOG3010: WAREHOUSE & DISTRIBUTE 3 (continued)

Concept	Specific Learner Expectations	Notes
Career Opportunities	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • identify and describe requirements for entry into a warehousing and distribution career as a: <ul style="list-style-type: none"> – loss prevention manager – systems engineer – packaging supervisor – distribution centre manager – warehouse foreman – warehouse officer – warehouse manager – any other warehousing and distribution position. 	<p>Include in discussions of requirements:</p> <ul style="list-style-type: none"> • physical fitness • academic • willingness to learn • teamwork • numeracy • communication requirements/abilities.

MODULE LOG3020: TRAFFIC & TRANSPORT 3

Level: Advanced

Theme: Traffic and Transportation

Prerequisite: LOG2020 Traffic & Transport 2

Module Description: Students explore transport regulations and licencing, and develop competency in planning a route and developing contingency plans.

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"> • demonstrate competency in planning a route and developing contingency plans • demonstrate a basic understanding of: <ul style="list-style-type: none"> – equipment handling certification requirements – vendor and carrier licencing and training for dangerous goods – rates and tariffs – liabilities 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> • completing, with minimal assistance: <ul style="list-style-type: none"> – route planning – contingency planning • identifying and explaining key items of legislation and licencing that affect the traffic and transportation subsector • comparing rates and tariffs to determine contract rate • explaining liability and insurance requirements and responsibilities. <p><i>Assessment Tool</i> <i>LOG3020: Traffic & Transport 3 Competency Profile and Assessment Checklist</i></p> <p><i>Standard</i> <i>A minimum performance rating of 3 for each applicable area of assessment</i></p>	<p></p> <p>30</p> <p>30</p> <p>20</p> <p>10</p> <p>10</p>

MODULE LOG3020: TRAFFIC & TRANSPORT 3 (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
Route Planning	<p><i>The student should:</i></p> <ul style="list-style-type: none"> plan a route, using: <ul style="list-style-type: none"> traditional map computerized format develop contingency plans where appropriate. 	
Transport Regulations and Licencing	<ul style="list-style-type: none"> identify and list key: <ul style="list-style-type: none"> transportation regulations and licencing requirements weight restrictions seasonal restrictions jurisdictional restrictions and requirements list licencing required to operate different vehicles and vessels. 	
Equipment Handling	<ul style="list-style-type: none"> identify licencing or certification requirements for each item of transportation equipment or aid initiate procedures to obtain a licence or certificate (where appropriate and necessary) demonstrate consistent ability to safely handle, operate and use various equipment aids relating to traffic and transportation. 	<p>Students must be made aware of legislation and regulations relating to equipment usage or operations.</p> <p>Check need for students to become certified as licenced before using or operating specific equipments or aids.</p>

MODULE LOG3020: TRAFFIC & TRANSPORT 3 (continued)

Concept	Specific Learner Expectations	Notes
Dangerous Goods	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • identify and ensure that the vendor and carrier has the necessary licencing and training to handle and transport dangerous goods • demonstrate consistently the safe handling, storage and transportation of dangerous goods. 	
Rates and Tariffs	<ul style="list-style-type: none"> • identify and describe transportation rates and tariffs • demonstrate ability to compare present proposed rates to the previous contract rate • assist in determining the contracted rate taking into account: <ul style="list-style-type: none"> – market prices – costs of the supplier – customer needs. 	
Liabilities	<ul style="list-style-type: none"> • identify liability assumed by different modes of carriers • identify and describe: <ul style="list-style-type: none"> – Workers' Compensation Board (WCB) requirements – insurance requirements • identify damage claimable: <ul style="list-style-type: none"> – items – procedures – documents • assist in completing damage claim documents • identify and report shipment over/shorts • explain the use of Bill of Lading and liabilities, and Freight on Board (FOB) • describe applications of Freight on Board statements; e.g.: <ul style="list-style-type: none"> – payment for carriage – selection of courier – limits of liability. 	

MODULE LOG3020: TRAFFIC & TRANSPORT 3 (continued)

Concept	Specific Learner Expectations	Notes
Career Opportunities	<p><i>The student should:</i></p> <ul style="list-style-type: none">• identify and describe requirements for entry into a traffic and transportation career as a:<ul style="list-style-type: none">– account manager– licencing/operations assistant– rates analyst– broker– fleet manager– terminal manager– transportation specialist.	<p>Include a wide variety of requirements; e.g.:</p> <ul style="list-style-type: none">• academic• technical• teamwork• communication• numeracy.

MODULE LOG3030: PURCHASING 3 (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>Ethics</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • define the term professional ethics • identify and explain the role of professional ethics in the purchasing process • define and give examples of conflict of interest • explain the role of the: <ul style="list-style-type: none"> – Purchasing Managerial Association of Canada (PMAC) – National Institute of Government Purchasing (NIGP) – International Federation of Purchasing and Materials Management (IFPMM). 	<p>The PMAC has an enforceable code of ethics.</p>
<p>Negotiation Skills</p>	<ul style="list-style-type: none"> • define the term negotiate • explain the purpose of negotiating in purchasing activities • demonstrate negotiating skills in purchasing activities. 	

MODULE LOG3030: PURCHASING 3 (continued)

Concept	Specific Learner Expectations	Notes
Contract and Business Law	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • identify key principles of contract and business law; e.g.: <ul style="list-style-type: none"> – liens – waivers – liability – negligence • explain the impact of contract and business law on purchasing activities • identify and describe legislation that affects purchasing activities; e.g., <i>Sales of Goods Act</i> • identify purchasing activities that are in alignment with contract and business law and relevant legislation. 	
Supplier Quality Assurance	<ul style="list-style-type: none"> • explain the principles of Supplier Quality Assurance (SQA) • identify and describe the impact of SQA on: <ul style="list-style-type: none"> – delivery – equality – invoicing – damaged goods – customer service. 	
Performance Management	<ul style="list-style-type: none"> • explain the principle of performance management • identify and describe the purpose of performance management in purchasing activities • identify and describe performance management models; e.g.: <ul style="list-style-type: none"> – Total Quality Management (TQM) – Quality Teams • evaluate performance management models employed using appropriate assessment tools and instruments. 	

MODULE LOG3030: PURCHASING 3 (continued)

Concept	Specific Learner Expectations	Notes
Career Opportunities	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • identify and describe requirements for entry into a purchasing career as a: <ul style="list-style-type: none"> – cost analyst – specialty products buyer – senior purchasing agent – maintenance manager – mobile equipment buyer – director of logistics – any other purchasing position • identify and describe requirements for designation as a: <ul style="list-style-type: none"> – Certified Professional Purchaser (CPP) – Certified Professional Public Buyer (CPPB) – Certified Professional Purchasing Officer (CPPO). 	<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 LOG3040: INVENTORY MANAGEMENT 2

Level: Advanced

Theme: Inventory Management and Control

Prerequisite: LOG2040 Inventory Management 1

Module Description: Students demonstrate competencies relating to product movement and replenishment strategies, budgeting, internal controls and asset recovery.

Module Parameters: Access to inventory management and control 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, describe and apply key principles of: <ul style="list-style-type: none"> product movement and replenishment strategies budget procedures internal controls asset recovery use basic technology to affect inventory management and control demonstrate basic competencies. 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> identifying, selecting and applying strategies and procedures appropriate to: <ul style="list-style-type: none"> product movement product replenishment budgeting internal controls asset recovery using technology to generate and maintain spreadsheets and databases. <p><i>Assessment Tool</i> <i>LOG3040: Inventory Management 2 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 3 for each applicable area of assessment</i></p>	<p></p> <p>20</p> <p>20</p> <p>20</p> <p>10</p> <p>10</p> <p>20</p> <p>Integrated throughout</p>

MODULE LOG3040: INVENTORY MANAGEMENT 2 (continued)

Concept	Specific Learner Expectations	Notes
Product Movement and Replenishment Strategies	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • explain the purpose of product movement and replenishment strategies • identify and describe product movement and replenishment strategies; e.g.: <ul style="list-style-type: none"> – degree – level – complexity • demonstrate basic product movement and replenishment strategies in inventory management and control activities. 	
Budget Procedures	<ul style="list-style-type: none"> • explain the impact of inventory management on the budget procedure • identify key budget procedures • explain how inventory management affects: <ul style="list-style-type: none"> – product quality – cost control. 	
Technology	<ul style="list-style-type: none"> • demonstrate ability to manage and control inventory using: <ul style="list-style-type: none"> – manual records – microfiche – spreadsheets – database systems – word processors • demonstrate ability to: <ul style="list-style-type: none"> – access inventory information – input inventory information – interpret information from various databases. 	
Internal Controls	<ul style="list-style-type: none"> • explain the purpose of internal inventory controls; e.g.: <ul style="list-style-type: none"> – security • identify and describe the internal inventory controls in effect; e.g.: <ul style="list-style-type: none"> – managerial practices – inventory flow – paper trail • demonstrate basic ability to use and maintain internal inventory controls. 	

MODULE LOG3040: INVENTORY MANAGEMENT 2 (continued)

Concept	Specific Learner Expectations	Notes
Asset Recovery	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • explain the concept of asset recovery • identify and describe strategies for asset recovery; e.g.: <ul style="list-style-type: none"> – asset disposition – recycling – reuse – recovery • assist in asset recovery activities. 	
Career Opportunities	<ul style="list-style-type: none"> • identify requirements for entry into an inventory management control career as a: <ul style="list-style-type: none"> – picker – order clerk – inventory analyst – loss prevention manager – software support buyer – Maintenance Repair and Operating (MRO) inventory specialist. 	<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.

