# Landscape Horticulturist On-the-Job Training Guide

2024

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Online: www.saskapprenticeship.ca

Recognition:

To promote transparency and consistency, portions of this document has been adapted from the 2018 Landscape Horticulturist Red Seal Occupational Standard (Employment and Social Development Canada).

A complete version of the Occupational Standard can be found at <u>www.red-seal.ca</u>



## STRUCTURE OF THE ON-THE-JOB TRAINING GUIDE

To facilitate understanding of the occupation, this on-the-job training guide contains the following sections:

**Task Matrix**: a chart which outlines graphically the major work activities, tasks and sub-tasks of this standard detailing the essential skills and the level of training where the content is covered.

Major Work Activity (MWA): the largest division within the standard that is comprised of a distinct set of trade activities.

Task: distinct actions that describe the activities within a major work activity.

Sub-task: distinct actions that describe the activities within a task.

**On-the-Job and In-school Training Content for the Landscape Horticulturist Trade**: a chart which outlines on-the-job examples for apprentices to achieve relevant work experience at work.



## TRAINING REQUIREMENTS FOR THE LANDSCAPE HORTICULTURIST TRADE

To graduate from each level of the apprenticeship program, an apprentice must successfully complete the required technical training and compile enough on-the-job experience to total at least 1500 hours each year. Total trade time required is 6000 hours and at least 4 years in the trade.

Journeyperson to apprentice ratio for this trade is: 1:2

The information contained in this document serves as a guide for employers and apprentices. Apprenticeship training is mutually beneficial to both employer and apprentice. The employer's investment in training apprentice's results in skilled and certified workers. The document summarizes the tasks to be covered by the apprentice during their on-the-job portion of apprenticeship training. An apprentice spends approximately 85% of their apprenticeship term training on-the-job.

## It is the employer's or journeyperson's responsibility to supervise an apprentice's practical skills development until a satisfactory level of proficiency has been reached.

#### EMPLOYER TRAINING RESPONSIBILITY

- introduce the apprentice to daily practice in approved safety procedures
- provide guided, hands-on practice in the operation and maintenance of tools and equipment
- demonstrate the techniques of growing, transplanting, installing and maintaining healthy, vigorous plant material.

Employers should make every effort to expose their apprentices to work experience in as many areas of the trade as possible.

In the On-the-Job Training Guide, in-school instruction is listed first; on-the-job suggestions to help employers assist the apprentice to prepare for in-school training are listed next.

The content of the training components is subject to change without notice.



3

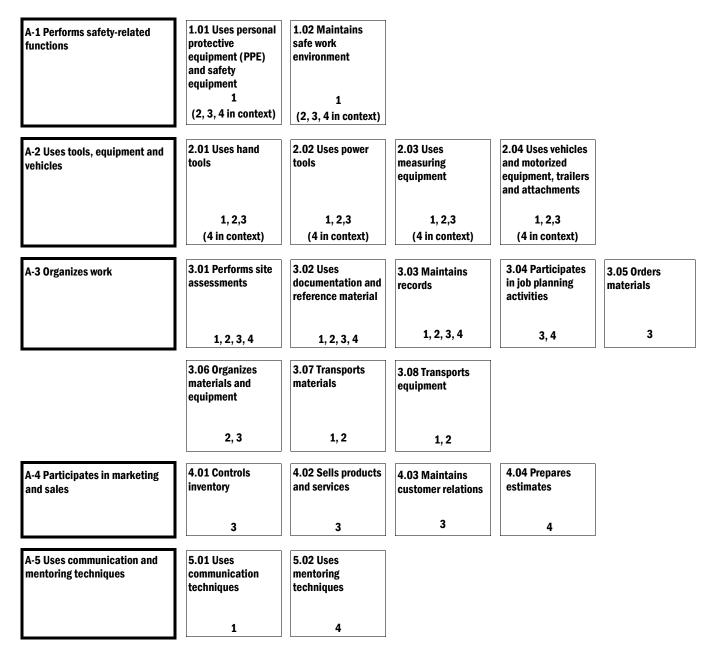
## LANDSCAPE HORTICULTURIST TASK MATRIX

This chart outlines the major work activities, tasks and sub-tasks from the 2018 Landscape Horticulturist Red Seal Occupational Standard. Each sub-task details the corresponding essential skill and level of training where the content is covered. \*

\* Sub Tasks with numbers in the boxes is where the content will be delivered in training.

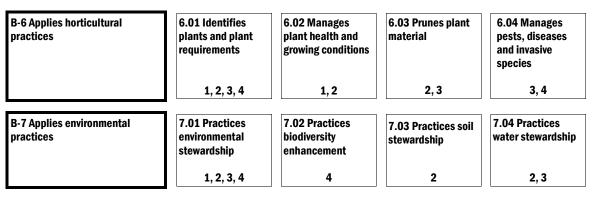
### **A – Performs Common Occupational Skills**

19%

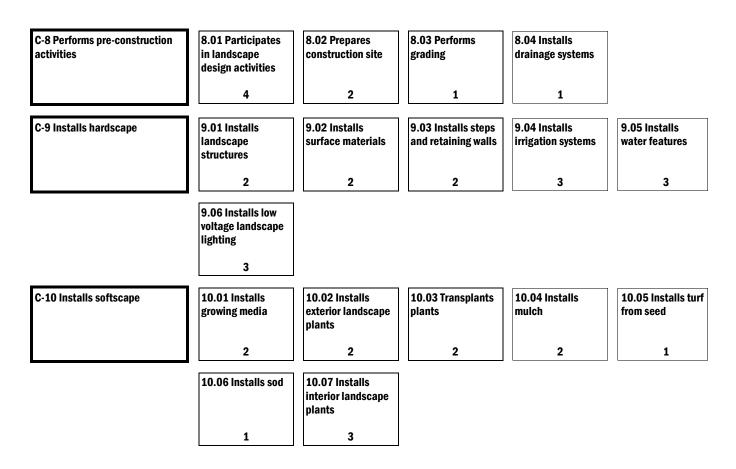




## **B – Applies Horticultural Principles**



## **C** – Performs Landscape Construction



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34%

5

C-11 Installs green infrastructure systems	11.01 Selects green infrastructure	11.02 Installs green roofs and walls	11.03 Installs rainwater and stormwater management systems	11.04 Installs erosion control	11.05 Installs biodiverse plantings and natural areas
	4	4	4	4	4

### **D** – Performs Landscape Maintenance

#### 12.01 Maintains 12.02 Maintains 12.03 Maintains 12.04 Maintains **D-12 Maintains hardscape** 12.05 Maintains drainage systems landscape surface materials steps and retaining irrigation systems walls structures 2 2 3 2 3 12.07 Maintains 12.06 Maintains 12.08 Practices 12.09 Repairs water features landscape lighting hardscape snow and ice control 3 3 3 2 **D-13 Maintains softscape** 13.01 Maintains 13.02 Maintains 13.03 Maintains **13.04** Propagates 13.05 Repairs exterior softscape interior softscape turfgrass plant material softscape 2 3 1, 2 3 1 14.03 Maintains 14.04 Maintains 14.01 Maintains 14.02 Maintains D-14 Maintains green green roofs and rainwater and erosion control biodiverse infrastructure stormwater walls plantings and management natural areas systems 4 4 4 4



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23%

### **E** – Works in Production Plant Material (NOT COMMON CORE)

17.06 Ships

15.01 Builds 15.02 Installs E-15 Constructs growing growing facilities growing facility facilities components (Not Common Core) (Not Common Core) (Not Common Core) 16.02 Maintains 16.01 Operates 16.03 Operates 16.04 Operates E-16 Operates and maintains growing facility climate control irrigation and sanitary growing facilities structures and environments systems fertigation systems (Not Common Core) amenities (Not Common Core) (Not Common Core) (Not Common Core) (Not Common Core) 17.01 Develops **17.02** Propagates **17.03 Transplants** 17.04 Grows 17.05 Harvests E-17 Manages greenhouse crops greenhouse crop greenhouse crops greenhouse crops greenhouse crops greenhouse crops (Not Common Core) production plan (Not Common Core) (Not Common Core) (Not Common Core) (Not Common Core) (Not Common Core)

greenhouse crops (Not Common Core) 18.04 Grows field 18.01 Develops **18.02** Propagates 18.03 Transplants 18.05 Harvests E-18 Manages nursery crops field and container field and container and container crops field and container nursery crop (Not Common Core) production plan crops crops crops (Not Common Core) 18.06 Ships field 18.07 Winterizes and container field and container crops crops (Not Common Core) (Not Common Core)

This Major Work Activity is not consistently performed by Landscape Horticulturists across Canada, therefore this content is deemed not common core and will not be assessed on the Landscape Horticulturist certification examination.

0%

## **TRAINING PROFILE CHART**

Since Landscape Horticulturist Technical Training is completed in Alberta, this Training Profile Chart represents Alberta Apprenticeship technical training which is performed at the topic level.

Alberta Level One	Hours
Workplace Safety and Occupational Skills	14
Trade Related Safety Tools, Equipment and Vehicles	34
Soil and Water	60
Plant properties, Grassland and Parkland	74
Site Assessment, Grading and Drainage	22
Turfgrass and Exterior Softscape Maintenance	36
	240

Alberta Level Two	Hours
Softscape Installation and Pruning	24
Surveying and Site Assessment	32
Physiology, Boreal, Montane and Wetland Plants	40
Landscape Pests	50
Conservation	24
Hardscape Installation and Maintenance	70
	240



8

Alberta Level Three	Hours
Project Management	19
Landscape Construction and Irrigation	67
Softscape Maintenance	24
Sustainable Horticultural Practices	41
Urban Forestry and Arboriculture	58
Growing Facilities	31
	240

Alberta Level Four	Hours
Business Administration	14
Contract Management	41
Landscape Design	70
Sustainable Landscape Technologies	29
Speciality Crops	38
Nursery Production and Greenhouse Crops	48
	240



## **ON-THE-JOB AND IN-SCHOOL TRAINING CONTENT FOR THE LANDSCAPE HORTICULTURIST TRADE**

This chart outlines on-the-job examples for apprentices to achieve relevant work experience to prepare for the topics of technical training. Topics of technical training are provided with the associated learning outcomes.

## Level One

## 8 weeks

#### Workplace Safety and Occupational Skills

- applies legislation, regulations and practices ensuring safe work.
- uses industry standard practices for climbing, lifting, rigging and hoisting.
- applies industry standard practices for hazardous materials and fire • protection.
- manage an apprenticeship to earn journeyman certification.
- use communication strategies.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- identifying types of PPE and clothing and describe their applications
- discussing safe work practices required by Occupational Health and Safety (OH&S)
- providing WHMIS and first aid training along with company-specific safety procedures •
- explaining fire fighting equipment the procedures for extinguishing fires
- ensuring the apprentice maintains safe work habits
- discussing safe practices in the storage, use, handling and transport of hazardous products
- demonstrating effective communication in customer relations and human relations on the job site

#### **Tools, Equipment and Vehicles**

- uses trade related tools. •
- use equipment. •
- maintains hydraulic systems. •
- operates heavy equipment. •
- operates commercial vehicles. •
- transports equipment
- transports materials.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- explaining the safety equipment and devices required for commercial vehicles
- demonstrating recommended maintenance practices on machinery
- performing basic engine maintenance and operation on two and four stroke engines
- explaining the different fluid types, system components and basic maintenance and troubleshooting
- ensuring proper training for use and maintenance of hand / power tools and equipment



34 hours

14 hours

#### Site Assessment, Grading and Drainage

- performs pre-construction site assessment.
- interprets utility locates.
- performs site grading.
- installs drainage systems.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- identifying hazards and describe safe work practices pertaining to site assessment, grading, drainage and the transporting of materials
- describing the implications of site assessment on the practice of environmental stewardship
- identifying specific tools and equipment relating to site assessment, grading and drainage and describing their applications and procedures for use
- identifying the methods and procedures used to perform site assessment
- performing slope calculations for site grading and preparation
- identifying types of trade related documentation and describe their applications
- interpreting information on landscape drawings, specifications and design principles
- identifying types of safety records and work records
- explaining the importance of accurate record keeping and describe the associated procedures
- defining terminology associated with transporting materials
- interpreting documentation relevant to transporting materials
- describing the procedures used for transporting materials
- using effective listening and speaking skills
- identifying personal responsibilities and attitudes that contribute to on-the-job success
- identifying the value of diversity in the workplace
- identifying communication that constitutes harassment and discrimination
- describing the implications of grading on the practice of environmental stewardship
- interpreting codes and regulations pertaining to site protection, grading and drainage
- interpreting documentation pertaining to drainage plans, site protection, grading and drainage
- identifying specific tools and equipment relating to grading and describe their applications and procedures for use
- identifying types of drainage systems and the procedures used to install drainage systems

#### Plant properties, Grassland and Parkland

- evaluates plant health.
- uses the botanic classification system for plant identification.
- uses plants from the grassland and parkland ecosystems.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- familiarizing the apprentice with plant material by introducing characteristics used for plant classification and identification
- emphasizing the importance of Latin names of plant material for proper identification
- describing the function, value, and physical characteristics of plants for the landscape
- identifying the components of the plant cell and types of meristematic tissues
- describing the functions and growth patterns of a plant stem
- identifying selected aspects of leaf morphology and the function of leaves
- comparing the internal structure and growth characteristics of different types of root systems
- explaining the processes of pollination and fertilization of different flower types
- identifying the major internal parts, fruit types and the process of fruit development
- Introducing the apprentice to characteristics of parts of plants and their life cycle
- identifying selected interior plants by botanical, cultivar and common name
- discussing light, temperature, growing media and water for the landscape

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#### Soil and Water

- uses environmental stewardship principles.
- manages soil health.
- manages water quality for plant health.
- uses soilless media.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- discussing soil forming factors and the characteristics of grassland, forest and urban soils
- describing an ideal mineral soil and how soil components influence soil properties
- discussing soil properties and preparation, and explaining advantages and disadvantages of soil moisture and soil types
- performing lab tests to determine pH, EC, SAR and carbonate levels
- evaluating the affects of water quality on soil and plant growth
- describing the biological affects of soil biological properties on plant growth
- familiarizing the apprentice with soil testing, and with fertilizer and other soil amendments, and by discussing advantages and disadvantages of different types of mulches

#### **Turfgrass and Exterior Softscape Maintenance**

- installs turfgrass.
- maintains turfgrass.
- applies fertilizer.

•

• performs exterior softscape maintenance.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- describing the function and techniques of turfgrass fertilisation
- ensuring an understanding of the growing requirements and maintenance of turf varieties (soil, water, aeration, fertilizer, mowing heights) to ensure sustainability



#### • maintains relationships with stakeholders. Mentors can assist the apprentice to prepare for this section of technical training by:

**Level Two** 

- generating a base plan on selected specifications and landscape site
- interpreting work drawings and demonstrating the process for laying out a landscape site
- demonstrating intrapersonal management strategies and techniques
- emphasizing the importance of effective communication strategies and techniques
- describing the guidelines and principles of ethical interpersonal communication
- demonstrating sentence construction, grammar. Proof-reading and editing skills in written communications
- demonstrating effective communication in customer relations and human relations on the job site

#### Conservation

- practice environmental conservation.
- practice water conservation.
- practice soil conservation.

Surveying and Site Assessment

conducts site surveys. prepares construction sites. coordinates site layout.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- explaining describe preservation, conservation and regeneration principles and applications related to plant life, habitat, water table and water quality
- identifying environmental waste management best practices
- identifying products and practices for reducing harm and positively impacting the environment
- describing practices for maximizing green space and permeable surfaces

#### Hardscape Installation and Maintenance

- mitigates site risks.
- installs surface materials.
- installs retaining walls.
- maintains drainage systems.
- installs stone paving.
- uses timber construction techniques.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- identifying hazards and describe safe work practices pertaining to installing landscape structures and hardscape installation
- identifying products and materials used in landscape structure construction and describe their applications and procedures for use
- identifying the methods and procedures used to perform site layout
- identifying specific tools and equipment relating to hardscape installation and describe their applications and procedures for use
- describing the procedures used to estimate quantities of materials required to install hardscape

## 240 hours



32 hours

70 hours

#### Physiology, Boreal, Montane and Wetland Plants

- manages plant development.
- uses plants from the boreal forest region.
- uses plants from the montane region.
- uses plants from the wetlands.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- explaining photosynthesis, respiration, and other plant processes as they relate to plant growth and health
- describing phloem and water transport
- explaining the processes of protein synthesis and reproduction
- identifying physiological factors that affect plants response to stress
- identifying growing media conditions and properties
- Identifying treatment methods
- identifying the soil characteristics that impact soil chemical and biological properties
- identifying Canadian and regional landscape standards and jurisdictional regulations
- describing the implications of fertilizer management on the practice of environmental stewardship

#### Landscape Pests

- practices integrated pest management.
- manages weeds.
- manages plant disease.
- manages pests.
- applies pesticide legislation.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- discussing the management of ecosystem to prevent organisms from becoming pests
- identifying common types of insects, their damage and their management
- explaining plant diseases, symptoms and compare fungi, bacteria and disease organisms
- assisting in the proper identification of weed problems and by discussing the methods of control
- describing and overseeing the practice of safe practices in the use, handling and transport of pesticide chemicals
- identifying the considerations for selecting and applying pest and disease management measures
- identifying common types of pests, diseases and disorders, and describe their characteristics and life cycles
- identifying common types of diseases and disorders and describe their characteristics and life cycles
- identifying the factors for selecting and applying pest and disease management measures
- describing the procedures used to implement pest and disease management measures
- identifying jurisdictional regulations pertaining to pest and disease management
- identifying specific tools, equipment and products relating to pest and disease management and describing their applications and procedures for use
- describing the procedures associated with the handling, transportation, storage and disposal of pest and disease management related products and materials



40 hours

#### Softscape Installation and Pruning

- installs woody plants.
- installs mulch.
- prunes plants.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- describing the procedures used to inspect, use, maintain, store and transport pruning tools and equipment
- identifying hazards and describe safe work practices pertaining to pruning
- describing the purpose of pruning
- identifying factors that affect pruning times
- describing the procedures for removing plant parts and disposal of diseased and infested plant parts
- describing the procedures used to inspect, use, maintain, store and transport pruning tools and equipment



15

## **Level Three**

## 8 weeks

#### **Project Management**

- provides customer service.
- plans projects.
- manages inventory.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- describing the processes associated with maintaining customer relations
- identifying jurisdictional regulations pertaining to customer record information
- identifying the project requirements when planning jobs and job tasks
- describing the procedures for controlling inventory

#### Landscape Construction and Irrigation

- constructs water features.
- installs landscape lighting.
- installs irrigation systems.
- maintains irrigation systems.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- identifying types of landscape drawings and associated documentation and describe their characteristics and applications
- identifying the methods and procedures used to stake out points when performing site measurements and site layout as it pertains to construction site preparation
- identifying hazards and describe safe work practices pertaining to layout, grading and drainage
- describing the procedures used to install irrigation equipment and systems
- describing the factors in planning an irrigation system
- utilizing hydraulic data to design sprinkler irrigation systems
- explaining the block-system and quick-coupler design theories and design a residential irrigation system
- explaining the use of irrigation technology and regulatory requirements of water use
- describing irrigation requirements relative to plant type, soil type and environmental conditions
- identifying the components of residential and commercial irrigation systems
- explaining the various types of irrigation pumps
- explaining the design factors in both residential and commercial systems
- interpreting basic irrigation specifications and materials
- performing installation procedures for irrigation and landscape lighting systems
- both maintaining and repairing an irrigation system
- assisting the apprentice in understanding the importance of available pressure, flow rate and water source as it relates to irrigation design and troubleshooting
- identifying design techniques for water conservation and implementing water auditing procedures
- assisting the apprentice in understanding the importance of available pressure, flow rate and water source as it relates to irrigation design and troubleshooting
- identifying design techniques for water conservation and implementing water auditing procedures
- describing the procedures used to estimate quantities of materials required to install low voltage landscape lighting



240 hours

#### Softscape Maintenance

- repairs softscapes.
- installs interior landscapes plants.
- maintains interior landscapes plants.
- practices snow and ice control.
- maintains landscape structures.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- identifying hazards and describe safe work practices pertaining to repairing softscapes
- identifying specific tools and equipment relating to exterior softscape and describe their applications and procedures for use
- identifying the considerations for the selection of plants for interior uses
- describing the procedures used to maintain interior plants
- identifying selected interior plants by botanical, cultivar and common name
- discussing light, temperature, growing media and water for interior plants
- identifying the considerations for determining suitability of planting site for plant material
- identifying jurisdictional regulations pertaining to snow and ice control procedures and products
- identifying products used for snow and ice control

#### **Sustainable Horticultural Practices**

- applies environmental practices.
- uses introduced herbaceous plants.
- uses introduced woody plants.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- describing preservation, conservation and regeneration principles and applications related to plant life, habitat, water table and water quality
- describing the impact of the environment and landscapes on psychosocial health
- identifying products and practices for reducing harm and positively impacting the environment
- describing practices for maximizing green space and permeable surfaces

#### **Urban Forestry and Arboriculture**

- assesses tree physiology in the landscape.
- applies techniques to achieve plant independence in the landscape.
- assesses trees.
- protects trees in the landscape.
- prunes trees.
- removes trees.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- identifying the value of environmental, economic and social impact of urban forests and arboriculture
- discussing to common goals and challenges involved in urban forest management
- explaining tree anatomy to determine the health of trees
- demonstrating pruning techniques such as crown reduction and raising, thinning and removal
- describing tree bracing, cabling and flexible support systems and other tree repair techniques
- demonstrate general chainsaw use, tree felling and removal rigging techniques and procedures
- identifying climbing gear and equipment, climbing techniques, selected rope knots and various aerial procedures and operations
- practising methods of determining tree conditions and risk assessment processes
- describing the factors involved in valuation and the replacement cost methods

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41 hours

- identifying the factors in inventory and describing the use of the Global Information System(GIS) for tree inventory
- calculating tree protection zones and construction site conservation of trees
- describing the means of liability issues and determining legislation related to arboriculture work

#### **Growing Facilities**

- constructs a growing facility.
- operates a growing facility.
- creates a sanitary environment.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- explaining cost of production vs. purchase from other sources as it relates to nursery vs. field production, container production and sod production
- discussing and comparing selected nursery containers
- explaining the importance of standardized stock as it is referred to in the Canadian Nursery Landscape Association (CNLA) specification book
- practising storage practices, seed collection and selected treatments to enhance germination
- outlining the sod establishment, production and harvesting processes
- comparing plant container characteristics and growing media for plant production
- explaining how different greenhouse environments can influence plant growth
- demonstrating seeding and vegetative propagation techniques
- practising the transplanting of seedlings and potting-up of vegetable cuttings
- describing the benefits, procedures and tolerance factors for hardening off plants
- identifying common greenhouse pests and diseases and their damage symptoms
- describing efficient methods for packaging, storing and shipping greenhouse crops
- assessing the orientation of typical greenhouse structures
- identifying and operating the different systems of greenhouse environmental controls



## **Level Four**

### 8 weeks

## 240 hours

#### **Business Administration**

- conducts post construction site assessments.
- schedules resources for a landscape project.
- uses coaching skills when training an apprentice.
- describes the role of the network of industry committees that represent trades and occupations
- uses Red Seal products to challenge an interprovincial examination.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- describing the Labour Standards Act, OH&S, WCB coverage and typical employee benefits packages
- explaining employee retention and recruitment strategies
- defining mentoring skills for enhancing employee productivity and job satisfaction
- explaining the roles of the advisory network and apprenticeship committees
- explaining basic financial information in operating a business

#### **Contract Management**

- prepares estimates for landscape projects.
- implements contract security measures.
- prepares bids for landscape projects.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- assisting the apprentice prepare a quote for a landscape project
- describing the parameters of the suppliers / contractors guarantees and warranties
- assisting the apprentice prepare a written tender for a landscape project
- describing selected types of contracts and regulations used in landscape construction and maintenance
- assisting the apprentice to prepare a written schedule for a landscape project

#### Landscape Design

- analyze landscape designs.
- uses drafting to create a landscape design.
- applies design processes to landscape projects.
- develops construction plans.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- introducing site assessment, design layout, implementation and finished landscape
- emphasizing the importance of customer requirements and understanding of the design and cost relationship
- developing manual graphic skills using selected drafting tools, drawings and landscape symbols
- applying the landscape design process to a selected landscape project
- developing a landscape master plan for a selected project
- preparing landscape construction plans for a project site
- assisting the apprentice prepare a quote for a landscape project
- describing the parameters of the suppliers / contractors guarantees and warranties
- assisting the apprentice prepare a written tender for a landscape project
- describing selected types of contracts and regulations used in landscape construction and maintenance

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14 hours

41 hours

- assisting the apprentice to prepare a written schedule for a landscape project
- describing the functions and specifications of bid documents
- defining the materials and strategies of low impact development
- describing the functions of computer-aided drafting, 3D modelling and digital image rendering applications

#### Sustainable Landscape Technologies

• evaluates economics of sustainable landscape technologies.

- maintains green roofs.
- maintains living walls.
- manages rainwater.
- controls erosion.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- assisting the apprentice complete a carpentry project from interpreting plan details, estimating quantities and types of materials needed and construct a project from plan specifications
- developing a water feature, green roof or living walls project construction plan
- assisting the apprentice to design, estimate and construct a project in a water feature
- describing design and construction strategies reducing the environmental impact

#### Specialty Crops

- grows edible fruit species.
- grows vines.
- grows geophytes.
- grows bedding plants.
- grows ornamental grasses.

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- identifying the components of the plant cell and types of meristematic tissues
- describing the functions and growth patterns of a plant stem
- identifying selected aspects of leaf morphology and the function of leaves
- comparing the internal structure and growth characteristics of different types of root systems
- explaining the processes of pollination and fertilization of different flower types
- identifying the major internal parts, fruit types and the process of fruit development
- introducing the apprentice to characteristics of parts of plants and their life cycle.
- comparing plant container characteristics and growing media for plant production
- demonstrating seeding and vegetative propagation techniques
- practising the transplanting of seedlings and potting-up of vegetable cuttings
- describing the benefits, procedures and tolerance factors for hardening off plants

#### **Nursery Production and Greenhouse Crops**

- propagates crops.
- transplants crops.
- grows crops.
- harvests crops.
- winterizes crops.
- ships crops.





38 hours

29 hours

#### Mentors can assist the apprentice to prepare for this section of technical training by:

- comparing plant container characteristics and growing media for plant production
- explaining how different greenhouse environments can influence plant growth
- demonstrating seeding and vegetative propagation techniques
- practising the transplanting of seedlings and potting-up of vegetable cuttings
- describing the benefits, procedures and tolerance factors for hardening off plants
- identifying common greenhouse pests and diseases and their damage symptoms
- describing efficient methods for packaging, storing and shipping greenhouse crops
- assessing the orientation of typical greenhouse structures
- identifying and operating the different systems of greenhouse environmental controls



Consider apprenticeship training as an investment in the future of your company and in the future of your workforce. Ultimately, skilled and certified workers increase your bottom line.

Get involved in the apprenticeship training system. Your commitment to training helps to maintain the integrity of the trade.

Do you have employees who have been working in the trade for a number of years but don't have trade certification? Contact your local apprenticeship office for details on how they might obtain the certification they need.

Saskatchewan Apprenticeship & Trade Certification Commission 2140 Hamilton St Regina SK S4P 2E3 Tel: (306) 787-2444 Fax: (306) 787-5105 Toll Free: 1-877-363-0536 Website: www.saskapprenticeship.ca

#### **District Offices**

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