Landscape Horticulturist

Saskatchewan Online Option for Apprenticeship Training A Guide to Course Content

Landscape Horticulturists are involved in growing, installing, maintaining and selling plants and related materials; landscape; operates greenhouses, nurseries and garden centres; moves trees.

Training Requirements: To graduate from each level of the online option for apprenticeship technical training program, an apprentice must successfully complete the required technical training courses 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.

The courses are divided into four levels of technical training delivered through the University of Saskatchewan's Prairie Horticulturist Certificate (PHC) Program and the Saskatchewan Construction Safety Association:

Level One:

- HORT 13.6 Applied Botany
- SLSC 14.6 Soils for Horticulture
- SCOT Safety Construction Orientation Training (SCOT), Saskatchewan Construction Safety Association (SCSA)

Level Two:

- HORT 14.6 Integrated Plant Management
- HORT 27.3 Woody Landscape Plants
- HORT 37.3 Landscape Construction

Level Three:

- HORT 30.3 Arboriculture
- HORT 31.6 Turf Grass Production and Management
- HORT 15.3 Safe Work / Pesticide Application

Level Four:

- HORT 34.6 Indoor Landscaping
- HORT 36.6 Landscape Design
- HORT 42.3 Basics of Horticulture Business Management



Technical Training Enrollment Process

Step # 1

 Candidates must register as apprentices. For more information on the apprentice registration process, refer to the Apprenticeship and Trade Certification Commission website at https://saskapprenticeship.ca/workers/register-for-apprenticeship/

Step#2

 Apprentices will be contacted to determine which pathway of technical training is selected; in-class training delivered through Olds College in Alberta, or the Saskatchewan Online Option for Apprenticeship Training delivered through the PHC distance education courses, University of Saskatchewan.

Step#3

 Apprentices apply to the University of Saskatchewan PHC program and pay the application fee. Under the *Program Stream*, apprentices will need to select the *Landscape and Arboriculture Stream* and then follow the prompts. For more information about the PHC registration process refer to the PHC website at https://admissions.usask.ca/prairie-horticulture.php#Readytoapply

Step # 4

Apprentices work and learn on the job as they attend and successfully complete the PHC technical training courses in the order prescribed by level. Apprentices must maintain an overall average of at least 70% in the courses taken per level, with no mark below 60% to pass the level of technical training and qualify to receive their year cards*

Step #5

- Once apprentices have successfully completed all the required technical training, worked in the trade for 4 years, and have obtained 6000 hours in the trade, both work experience and technical training credit hours, they can apply to write the Red Seal Journeyperson examination. Pass mark for the journeyperson examination is 70%.
- * There are grants available for apprentices progressing and completing their training. For information on grants, scholarships and other supports please see the links below:
 - http://saskapprenticeship.ca/resources/tax-programs/
 - http://www.saskatchewan.ca/residents/education-and-learning/scholarships-bursariesgrants/scholarships/saskatchewan-advantage-scholarship
 - https://www.canada.ca/en/employment-socialdevelopment/services/funding/apprenticeship-incentive-overview.html
 - https://www.canada.ca/en/employment-socialdevelopment/services/funding/apprenticeship-completion-overview.html



NOTE: Once an apprentice has completed nine courses and at least 360 credit hours they can also apply through the U of S to receive their *Arboriculture Stream PHC certificate*.

Saskatchewan Online Option for Landscape Horticulturist Training SNAPSHOT

Register as apprentice → Receive Level 1 Card

Register for PHC

Successfully complete required Level 1 courses*

Provide transcripts to Saskatchewan Apprenticeship and Training Certification Commission (SATCC)

Receive 240 hours technical training credit
With proof of 1500 hours of total trade time → Receive Level 2 Card

Successfully complete required Level 2 courses*

Provide transcripts to SATCC

Receive 240 hours technical training credit

With proof of 3000 hours of total trade time → Receive Level 3 Card

Successfully complete required Level 3 courses*

Provide transcripts to SATCC

Receive 240 hours technical training credit

With proof of 4500 hours of total trade time → Receive Level 4 Card

Successfully complete required Level 4 courses*

Provide transcripts to SATCC Receive 240 hours technical training credit

With 4 years of experience and 6000 hours

Apply to write IP

Note: Completion of level 4 training additionally results in the University of Saskatchewan Horticulture Landscaping and Arboriculture Certificate.



^{*}For the list of courses required for each level of training refer to page 1 of this document.

The information contained in this pamphlet serves as a guide for employers and apprentices. The pamphlet briefly summarizes the training delivered at each level of apprenticeship training. An apprentice spends approximately 15% of the apprenticeship term in a technical training institute learning the technical and theoretical aspects of the trade. The hours and percentages of technical and practical training may vary according to class needs and progress.

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

Level One: Three courses

- HORT 13.6 Applied Botany
- SLSC 14.6 Soils for Horticulture
- SCOT: Safety Construction Orientation Training (SCOT), Saskatchewan Construction Safety Association (SCSA)

HORT 13.6 Applied Botany

- Basic plant anatomy at the cellular level and whole organ level is covered as well as the processes of photosynthesis and respiration.
- Thorough coverage is given to plant classification and naming, with botanical grammar being stressed. Plant hormones, pollination, fruit set and ripening are discussed.
- Basic propagation is addressed and comprehensive coverage is given to climatic factors of importance to prairie horticulture.
- The course concludes with a discussion of diseases of significance to prairie horticulture.

SLSC 14.6 Soils for Horticulture

- This course provides an introduction to the fundamental principles of Soil Science with specific reference to the study of Horticulture.
- The components of soil, their physical and chemical properties, and soil-water relationships will be the theoretical basis on which soil management and fertility will be considered.
- Synthetic and natural fertilizers and amendments, which improve soil physical properties, will be investigated.
- Potting media for greenhouse production are examined; however, the course emphasis is on natural soils.

Saskatchewan Construction Safety Association (SCSA) Safety Construction Orientation Training (SCOT https://www.scsaonline.ca/courses/scot

- The Safety Construction Orientation Training (SCOT®) program is an interactive, online training course composed of 13 modules, each focused on a different fundamental aspect of worksite safety.
- SCOT is convenient, easy-to-use and accessible as the program is available on the web.
- The program begins with an introductory module that describes the content, purpose and important practical information necessary to help participants navigate through the training experience.
- This program now includes WHMIS 2015.



Level Two: Three courses

- HORT 14.6 Integrated Plant Management
- HORT 27.3 Woody Landscape Plants
- HORT 37.3 Landscape Construction

HORT 14.6 Integrated Plant Management

- The course outlines the basics of identifying, monitoring, predicting, and managing the environment and pest problems affecting horticulture crop growth.
- Upon completion of this course, the student should be able to describe and apply the principles of Integrated Plant Management.
- The student will be able to diagnose problems, provide solutions, and predict how the manipulation of growing conditions will impact other factors.

HORT 27.3 Woody Landscape Plants

- This course covers the identification and classification of woody ornamental plants.
- Plants common in the prairie environment are addressed and include deciduous and evergreen trees, shrubs, vines and ground covers.

HORT 37.3 Landscape Construction

- This course is an introduction to the theory and application of landscape construction.
- You will learn about: interlocking paving stones; water features; retaining walls; low voltage lighting; wooden decks; and fences.
- Safety procedures are emphasized.



Level Three: Three courses

- HORT 15.3 Safe Work/Pesticide Application
- HORT 30.3 Arboriculture
- HORT 31.6 Turf Grass Production and Management

HORT 15.3 Safe Work Pesticide Application

- Learn about different aspects of attitudes on safety in the use of pesticides in the horticulture industry.
- Topics include: basic chemistry; legislation and regulations; labeling; toxicity; handling practices; environmental protection; pest management; application equipment; emergency response; and public relations.
- The course provides an opportunity to write the qualifying exams for the Manitoba Pesticide Applicator Certification in the landscape category according to the National Task Force Standards on Pesticide Education, Training and Certification.

HORT 30.3 Arboriculture

- This course outlines basic terminology used in arboriculture, the principles of installation, and care and maintenance of trees and shrubs in the landscape.
- It also provides "how to" information in these areas.
- Finally, the effect of the environment on growth and development of woody plants is addressed.

HORT 31.6 Turf Grass Production and Management

- This course outlines the production and maintenance of turfgrasses to enable you to function within the landscaping and turf production industries.
- Topics include: an overview of the turfgrass industry; turfgrass physiology; plant morphology and species identification; native turfgrass; soils; turfgrass establishment, culture, management practices and problems; turfgrass pest control and integrated pest management.

Level Four: Three courses

- HORT 34.6 Indoor Landscaping
- HORT 36.6 Landscape Design
- HORT 42.3 Basics of Horticulture Business Management

HORT 34.6: Indoor Landscaping

- This course covers both the theory and practice of indoor landscaping.
- Topics include: an overview of the indoor landscaping industry; basic design concepts;
 people-plant relationships and the function of plants in the indoor environment.
- Plant culture, maintenance and integrated pest management are discussed.
- The course concludes with a section on indoor landscaping as a business: preparation of cost estimates, budgeting, advertising, etc.
- Students should be able to create, install and maintain a commercial indoor landscape on completion of this course.

HORT 36.6: Landscape Design

- Students will gain the skills needed to produce a simple residential landscape design for a client.
- This course covers the design process; identifying client needs; producing a series of preliminary site plans and a design program; using drafting equipment; and producing a basic landscape design in plan view

HORT 42.3: Basics of Horticulture Business Management

- This course introduces business management basics to students who are interested in operating a small business within the horticulture industry.
- Students gain an understanding of the characteristics of a small business and the principles of small business organizations; financial performance in a small business, small business budgeting and human resource management for the small business.