

COURSE LGA3406: EQUIPMENT AND TOOLS

Level:	First Period Apprenticeship
Prerequisite:	LGA3900: Apprenticeship Safety
Description:	Students use and operate tools and machinery to perform various landscaping jobs.
Parameters:	Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journey person certification in the landscape horticulturist trade.
Resources:	Please refer to the books and materials listed at Tradesecrets: Trades & Occupations List. If Individual Learning Modules (ILMs) are available for this trade, they can be accessed on LearnAlberta.ca .
Outcomes:	The student will:

1. use trade-related tools

- 1.1 identify types of hand tools
- 1.2 identify types of power tools
- 1.3 describe tool sign-out sheets
- 1.4 explain the use of hand tools
- 1.5 explain the use of power tools
- 1.6 explain tool maintenance

2. use equipment

- 2.1 identify engine components
- 2.2 identify types of engines
- 2.3 describe the operating principles of engines
- 2.4 describe applications for using outdoor power equipment
- 2.5 describe engine systems maintenance
- 2.6 describe three-point hitches
- 2.7 describe the components of power takeoff (PTO) coupler shafts
- 2.8 describe machinery protection features
- 2.9 describe belt systems
- 2.10 describe chain drive systems
- 2.11 explain equipment maintenance schedules
- 2.12 demonstrate equipment operation
- 2.13 demonstrate equipment maintenance

3. demonstrate basic competencies

- 3.1 demonstrate fundamental skills to:
 - 3.1.1 communicate
 - 3.1.2 manage information
 - 3.1.3 use numbers
 - 3.1.4 think and solve problems
- 3.2 demonstrate personal management skills to:
 - 3.2.1 demonstrate positive attitudes and behaviours
 - 3.2.2 be responsible
 - 3.2.3 be adaptable

- 3.2.4 learn continuously
- 3.2.5 work safely
- 3.3 demonstrate teamwork skills to:
 - 3.3.1 work with others
 - 3.3.2 participate in projects and tasks
- 4. create a transitional strategy to accommodate personal changes and build personal values**
 - 4.1 identify short-term and long-term goals
 - 4.2 identify steps to achieve goals

COURSE LGA3411: VEHICLE TRANSPORTATION AND OPERATION

- Level:** First Period Apprenticeship
- Prerequisite:** LGA3900: Apprenticeship Safety
- Description:** Students develop basic skills to operate and maintain hydraulics, heavy equipment, and transportation vehicles to safely perform various landscaping jobs. Students also demonstrate how to transport equipment and materials.
- Parameters:** Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journey person certification in the landscape horticulturist trade.
- Resources:** Please refer to the books and materials listed at Tradesecrets: Trades & Occupations List. If Individual Learning Modules (ILMs) are available for this trade, they can be accessed on LearnAlberta.ca.

Outcomes: The student will:

1. maintain hydraulic systems

- 1.1 describe types of hydraulic fluids
- 1.2 describe hydraulic principles
- 1.3 describe hydraulic systems
- 1.4 describe procedures for locating leaks
- 1.5 describe hydraulic test procedures
- 1.6 explain hydraulic system operation
- 1.7 explain troubleshooting operational problems
- 1.8 explain hydraulic system maintenance

2. operate heavy equipment

- 2.1 describe industry-related heavy equipment
- 2.2 describe procedures for working in and around heavy equipment
- 2.3 describe heavy equipment steering mechanisms
- 2.4 describe heavy equipment attachments
- 2.5 demonstrate hand signals used for working in and around heavy equipment
- 2.6 perform heavy equipment inspections

3. operate commercial vehicles

- 3.1 identify requirements to operate a commercial vehicle
- 3.2 describe the use of hazard warning devices
- 3.3 describe regulatory codes for the operation of a commercial vehicle
- 3.4 demonstrate the use of logbooks
- 3.5 perform safety checks on commercial vehicles
- 3.6 perform commercial vehicle pre-trip and post-trip inspections

4. transport equipment

- 4.1 identify equipment transportation hazards
- 4.2 describe vehicle, trailer, and equipment combination selection
- 4.3 describe jurisdictional regulations for securing and transporting equipment
- 4.4 describe vehicle and trailer signage for oversized loads

- 4.5 describe routing for transportation
- 4.6 explain equipment transportation documentation
- 5. transport materials**
 - 5.1 identify material transportation hazards
 - 5.2 describe the procedures used for transporting materials
 - 5.3 describe securing and covering materials
 - 5.4 explain material transportation documentation
- 6. demonstrate basic competencies**
 - 6.1 demonstrate fundamental skills to:
 - 6.1.1 communicate
 - 6.1.2 manage information
 - 6.1.3 use numbers
 - 6.1.4 think and solve problems
 - 6.2 demonstrate personal management skills to:
 - 6.2.1 demonstrate positive attitudes and behaviours
 - 6.2.2 be responsible
 - 6.2.3 be adaptable
 - 6.2.4 learn continuously
 - 6.2.5 work safely
 - 6.3 demonstrate teamwork skills to:
 - 6.3.1 work with others
 - 6.3.2 participate in projects and tasks
- 7. create a transitional strategy to accommodate personal changes and build personal values**
 - 7.1 identify short-term and long-term goals
 - 7.2 identify steps to achieve goals

COURSE LGA3416: SITE MAINTENANCE

Level:	First Period Apprenticeship
Prerequisite:	LGA3900: Apprenticeship Safety
Description:	Students develop the basic skills to conduct site assessments, perform site grading, and install drainage systems at landscaping jobs.
Parameters:	Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journey person certification in the landscape horticulturist trade.
Resources:	Please refer to the books and materials listed at Tradesecrets: Trades & Occupations List. If Individual Learning Modules (ILMs) are available for this trade, they can be accessed on LearnAlberta.ca .
Outcomes:	The student will:

- 1. perform pre-construction site assessments**
 - 1.1 identify site hazards
 - 1.2 identify existing conditions
 - 1.3 identify security requirements
 - 1.4 identify site access
 - 1.5 describe site-specific information required to complete project tasks
 - 1.6 perform visual inspection of the site and neighbouring properties
 - 1.7 perform a site-hazard assessment
- 2. interpret utility locates**
 - 2.1 identify areas to be excavated and to be protected
 - 2.2 identify septic systems and well locations
 - 2.3 explain above- and below-ground utility locates
- 3. perform site grading**
 - 3.1 describe grade certificates
 - 3.2 describe grade illustrations on a plan
 - 3.3 describe technologies used to assist in grading
 - 3.4 develop a site-drainage plan
 - 3.5 perform slope calculations for site grading
 - 3.6 perform cut and fill calculations
 - 3.7 perform site grading
- 4. install drainage systems**
 - 4.1 identify surface-drainage systems
 - 4.2 identify sub-surface drainage systems
 - 4.3 describe drainage system backfill
 - 4.4 develop drainage system layouts
 - 4.5 demonstrate how to build a drainage system
- 5. demonstrate basic competencies**
 - 5.1 demonstrate fundamental skills to:
 - 5.1.1 communicate
 - 5.1.2 manage information

- 5.1.3 use numbers
- 5.1.4 think and solve problems
- 5.2 demonstrate personal management skills to:
 - 5.2.1 demonstrate positive attitudes and behaviours
 - 5.2.2 be responsible
 - 5.2.3 be adaptable
 - 5.2.4 learn continuously
 - 5.2.5 work safely
- 5.3 demonstrate teamwork skills to:
 - 5.3.1 work with others
 - 5.3.2 participate in projects and tasks
- 6. create a transitional strategy to accommodate personal changes and build personal values**
 - 6.1 identify short-term and long-term goals
 - 6.2 identify steps to achieve goals

COURSE LGA3425: PLANT TAXONOMY

Level:	First Period Apprenticeship
Prerequisite:	LGA3900: Apprenticeship Safety
Description:	Students develop basic skills of plant taxonomy to identify and maintain plants used for landscaping.
Parameters:	Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journey person certification in the landscape horticulturist trade.
Resources:	Please refer to the books and materials listed at Tradesecrets: Trades & Occupations List. If Individual Learning Modules (ILMs) are available for this trade, they can be accessed on LearnAlberta.ca .
Outcomes:	The student will:

- 1. use the botanic classification system for plant identification**
 - 1.1 explain the botanic classification system
 - 1.2 explain plant family characteristics
 - 1.3 demonstrate plant use in the landscape
 - 1.4 demonstrate the use of plant identification resources
 - 1.5 demonstrate the use of taxonomic keys
- 2. demonstrate basic competencies**
 - 2.1 demonstrate fundamental skills to:
 - 2.1.1 communicate
 - 2.1.2 manage information
 - 2.1.3 use numbers
 - 2.1.4 think and solve problems
 - 2.2 demonstrate personal management skills to:
 - 2.2.1 demonstrate positive attitudes and behaviours
 - 2.2.2 be responsible
 - 2.2.3 be adaptable
 - 2.2.4 learn continuously
 - 2.2.5 work safely
 - 2.3 demonstrate teamwork skills to:
 - 2.3.1 work with others
 - 2.3.2 participate in projects and tasks
- 3. create a transitional strategy to accommodate personal changes and build personal values**
 - 3.1 identify short-term and long-term goals
 - 3.2 identify steps to achieve goals

COURSE LGA3435: BOTANY 1

Level:	First Period Apprenticeship
Prerequisite:	LGA3900: Apprenticeship Safety
Description:	Students develop basic skills related to botany, such as identifying the functions of plant cells and tissues, plant stems, and plant leaves.
Parameters:	Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journey person certification in the landscape horticulturist trade.
Resources:	Please refer to the books and materials listed at Tradesecrets: Trades & Occupations List. If Individual Learning Modules (ILMs) are available for this trade, they can be accessed on LearnAlberta.ca .
Outcomes:	The student will:

1. evaluate plant health

- 1.1 identify cell components
- 1.2 explain cell characteristics
- 1.3 explain tissue characteristics
- 1.4 explain stem characteristics
- 1.5 explain leaf characteristics

2. demonstrate basic competencies

- 2.1 demonstrate fundamental skills to:
 - 2.1.1 communicate
 - 2.1.2 manage information
 - 2.1.3 use numbers
 - 2.1.4 think and solve problems
- 2.2 demonstrate personal management skills to:
 - 2.2.1 demonstrate positive attitudes and behaviours
 - 2.2.2 be responsible
 - 2.2.3 be adaptable
 - 2.2.4 learn continuously
 - 2.2.5 work safely
- 2.3 demonstrate teamwork skills to:
 - 2.3.1 work with others
 - 2.3.2 participate in projects and tasks

3. create a transitional strategy to accommodate personal changes and build personal values

- 3.1 identify short-term and long-term goals
- 3.2 identify steps to achieve goals

COURSE LGA3440: BOTANY 2

Level: First Period Apprenticeship

Prerequisite: LGA3435: Botany 1

Description: Students develop basic skills related to botany, such as identifying the functions of plant roots and plant flowers, explaining fruit characteristics, and describing the life cycles of plants.

Parameters: Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journey person certification in the landscape horticulturist trade.

Resources: Please refer to the books and materials listed at Tradesecrets: Trades & Occupations List. If Individual Learning Modules (ILMs) are available for this trade, they can be accessed on LearnAlberta.ca.

Outcomes: The student will:

1. evaluate plant health

- 1.1 explain characteristics of roots
- 1.2 explain characteristics of flowers
- 1.3 explain characteristics of fruit
- 1.4 explain monocot and dicot characteristics
- 1.5 explain life cycles of plants

2. demonstrate basic competencies

- 2.1 demonstrate fundamental skills to:
 - 2.1.1 communicate
 - 2.1.2 manage information
 - 2.1.3 use numbers
 - 2.1.4 think and solve problems
- 2.2 demonstrate personal management skills to:
 - 2.2.1 demonstrate positive attitudes and behaviours
 - 2.2.2 be responsible
 - 2.2.3 be adaptable
 - 2.2.4 learn continuously
 - 2.2.5 work safely
- 2.3 demonstrate teamwork skills to:
 - 2.3.1 work with others
 - 2.3.2 participate in projects and tasks

3. create a transitional strategy to accommodate personal changes and build personal values

- 3.1 identify short-term and long-term goals
- 3.2 identify steps to achieve goals

COURSE LGA3441: ECOSYSTEMS

Level:	First Period Apprenticeship
Prerequisite:	LGA3900: Apprenticeship Safety
Description:	Students develop basic skills for using plants from grassland and parkland ecosystems in landscaping jobs.
Parameters:	Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journey person certification in the landscape horticulturist trade.
Resources:	Please refer to the books and materials listed at Tradesecrets: Trades & Occupations List. If Individual Learning Modules (ILMs) are available for this trade, they can be accessed on LearnAlberta.ca .
Outcomes:	The student will:

- 1. use plants from the grassland and parkland ecosystems**
 - 1.1 identify regional ecosystems
 - 1.2 describe characteristics of grassland and parkland ecosystems
 - 1.3 describe requirements of plants from the grassland and parkland ecosystems
 - 1.4 demonstrate the use of plants from grassland and parkland ecosystems
 - 1.5 demonstrate the use of related grassland and parkland species
- 2. demonstrate basic competencies**
 - 2.1 demonstrate fundamental skills to:
 - 2.1.1 communicate
 - 2.1.2 manage information
 - 2.1.3 use numbers
 - 2.1.4 think and solve problems
 - 2.2 demonstrate personal management skills to:
 - 2.2.1 demonstrate positive attitudes and behaviours
 - 2.2.2 be responsible
 - 2.2.3 be adaptable
 - 2.2.4 learn continuously
 - 2.2.5 work safely
 - 2.3 demonstrate teamwork skills to:
 - 2.3.1 work with others
 - 2.3.2 participate in projects and tasks
- 3. create a transitional strategy to accommodate personal changes and build personal values**
 - 3.1 identify short-term and long-term goals
 - 3.2 identify steps to achieve goals

COURSE LGA3446: ENVIRONMENTAL STEWARDSHIP AND WATER QUALITY

- Level:** First Period Apprenticeship
- Prerequisite:** LGA3900: Apprenticeship Safety
- Description:** Students develop and use the basic principles of environmental stewardship. Students develop basic skills for the stewardship and management of water and water quality.
- Parameters:** Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journey person certification in the landscape horticulturist trade.
- Resources:** Please refer to the books and materials listed at Tradesecrets: Trades & Occupations List. If Individual Learning Modules (ILMs) are available for this trade, they can be accessed on LearnAlberta.ca.

Outcomes: The student will:

- 1. use environmental stewardship principles**
 - 1.1 identify trends in sustainability
 - 1.2 identify principles of permaculture
 - 1.3 describe low-impact development
 - 1.4 describe urban heat island effect
- 2. manage water quality for plant health**
 - 2.1 identify water characteristics influencing plant health
 - 2.2 identify jurisdictional regulations relating to water stewardship
 - 2.3 describe methods of water stewardship
 - 2.4 describe water pollutants
 - 2.5 perform water-quality tests
- 3. demonstrate basic competencies**
 - 3.1 demonstrate fundamental skills to:
 - 3.1.1 communicate
 - 3.1.2 manage information
 - 3.1.3 use numbers
 - 3.1.4 think and solve problems
 - 3.2 demonstrate personal management skills to:
 - 3.2.1 demonstrate positive attitudes and behaviours
 - 3.2.2 be responsible
 - 3.2.3 be adaptable
 - 3.2.4 learn continuously
 - 3.2.5 work safely
 - 3.3 demonstrate teamwork skills to:
 - 3.3.1 work with others
 - 3.3.2 participate in projects and tasks
- 4. create a transitional strategy to accommodate personal changes and build personal values**
 - 4.1 identify short-term and long-term goals
 - 4.2 identify steps to achieve goals

COURSE LGA3451: SOIL MANAGEMENT 1

- Level:** First Period Apprenticeship
- Prerequisite:** LGA3900: Apprenticeship Safety
- Description:** Students develop basic skills related to soils, including formation, components, and properties.
- Parameters:** Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journey person certification in the landscape horticulturist trade.
- Resources:** Please refer to the books and materials listed at Tradesecrets: Trades & Occupations List. If Individual Learning Modules (ILMs) are available for this trade, they can be accessed on LearnAlberta.ca.
- Outcomes:** The student will:

1. manage soil health

- 1.1 describe soil properties
- 1.2 describe soil components
- 1.3 describe natural soil formation
- 1.4 describe effects of soil properties on plant growth

2. demonstrate basic competencies

- 2.1 demonstrate fundamental skills to:
 - 2.1.1 communicate
 - 2.1.2 manage information
 - 2.1.3 use numbers
 - 2.1.4 think and solve problems
- 2.2 demonstrate personal management skills to:
 - 2.2.1 demonstrate positive attitudes and behaviours
 - 2.2.2 be responsible
 - 2.2.3 be adaptable
 - 2.2.4 learn continuously
 - 2.2.5 work safely
- 2.3 demonstrate teamwork skills to:
 - 2.3.1 work with others
 - 2.3.2 participate in projects and tasks

3. create a transitional strategy to accommodate personal changes and build personal values

- 3.1 identify short-term and long-term goals
- 3.2 identify steps to achieve goals

COURSE LGA3456: SOIL MANAGEMENT 2

Level:	First Period Apprenticeship
Prerequisite:	LGA3451: Soil Management 1
Description:	Students develop basic skills related to soil, including biological properties, sampling, and fertility of soils.
Parameters:	Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journey person certification in the landscape horticulturist trade.
Resources:	Please refer to the books and materials listed at Tradesecrets: Trades & Occupations List. If Individual Learning Modules (ILMs) are available for this trade, they can be accessed on LearnAlberta.ca .
Outcomes:	The student will:

1. manage soil health

- 1.1 describe essential plant nutrients
- 1.2 describe impacts of compaction on soil health
- 1.3 explain the role of soil biota
- 1.4 explain the nitrogen cycle
- 1.5 explain plant nutrient availability
- 1.6 explain regional compost quality standards
- 1.7 explain soil sampling
- 1.8 develop soil amendment recommendations
- 1.9 demonstrate how to interpret a soil test

2. demonstrate basic competencies

- 2.1 demonstrate fundamental skills to:
 - 2.1.1 communicate
 - 2.1.2 manage information
 - 2.1.3 use numbers
 - 2.1.4 think and solve problems
- 2.2 demonstrate personal management skills to:
 - 2.2.1 demonstrate positive attitudes and behaviours
 - 2.2.2 be responsible
 - 2.2.3 be adaptable
 - 2.2.4 learn continuously
 - 2.2.5 work safely
- 2.3 demonstrate teamwork skills to:
 - 2.3.1 work with others
 - 2.3.2 participate in projects and tasks

3. create a transitional strategy to accommodate personal changes and build personal values

- 3.1 identify short-term and long-term goals
- 3.2 identify steps to achieve goals

COURSE LGA3461: SOILLESS GROWING MEDIA

Level:	First Period Apprenticeship
Prerequisite:	LGA3900: Apprenticeship Safety
Description:	Students describe the use of soilless media and demonstrate how to use soilless media.
Parameters:	Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journey person certification in the landscape horticulturist trade.
Resources:	Please refer to the books and materials listed at Tradesecrets: Trades & Occupations List. If Individual Learning Modules (ILMs) are available for this trade, they can be accessed on LearnAlberta.ca .
Outcomes:	The student will:

1. use soilless media

- 1.1 describe components of soilless media
- 1.2 describe amendments of soilless media
- 1.3 demonstrate blending soilless media

2. demonstrate basic competencies

- 2.1 demonstrate fundamental skills to:
 - 2.1.1 communicate
 - 2.1.2 manage information
 - 2.1.3 use numbers
 - 2.1.4 think and solve problems
- 2.2 demonstrate personal management skills to:
 - 2.2.1 demonstrate positive attitudes and behaviours
 - 2.2.2 be responsible
 - 2.2.3 be adaptable
 - 2.2.4 learn continuously
 - 2.2.5 work safely
- 2.3 demonstrate teamwork skills to:
 - 2.3.1 work with others
 - 2.3.2 participate in projects and tasks

3. create a transitional strategy to accommodate personal changes and build personal values

- 3.1 identify short-term and long-term goals
- 3.2 identify steps to achieve goals

COURSE LGA3466: TURFGRASS

Level:	First Period Apprenticeship
Prerequisite:	LGA3900: Apprenticeship Safety
Description:	Students install and maintain turfgrass used in landscaping.
Parameters:	Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journeyperson certification in the landscape horticulturist trade.
Resources:	Please refer to the books and materials listed at Tradesecrets: Trades & Occupations List. If Individual Learning Modules (ILMs) are available for this trade, they can be accessed on LearnAlberta.ca .

Outcomes: The student will:

- 1. install turfgrass**
 - 1.1 describe turfgrass characteristics
 - 1.2 describe seed establishment
 - 1.3 describe sod establishment
 - 1.4 demonstrate turfgrass installation
 - 1.5 perform seeding rate calculations
- 2. maintain turfgrass**
 - 2.1 describe turfgrass growth cycles
 - 2.2 describe turfgrass water management
 - 2.3 describe mowing techniques
 - 2.4 describe fertilization programs
 - 2.5 describe thatch management
 - 2.6 describe the effect of soil compaction on turfgrass
- 3. demonstrate basic competencies**
 - 3.1 demonstrate fundamental skills to:
 - 3.1.1 communicate
 - 3.1.2 manage information
 - 3.1.3 use numbers
 - 3.1.4 think and solve problems
 - 3.2 demonstrate personal management skills to:
 - 3.2.1 demonstrate positive attitudes and behaviours
 - 3.2.2 be responsible
 - 3.2.3 be adaptable
 - 3.2.4 learn continuously
 - 3.2.5 work safely
 - 3.3 demonstrate teamwork skills to:
 - 3.3.1 work with others
 - 3.3.2 participate in projects and tasks
- 4. create a transitional strategy to accommodate personal changes and build personal values**
 - 4.1 identify short-term and long-term goals
 - 4.2 identify steps to achieve goals

COURSE LGA3471: FERTILIZATION

- Level:** First Period Apprenticeship
- Prerequisite:** LGA3900: Apprenticeship Safety
- Description:** Students create a landscape fertilization program and apply fertilizer used in landscaping.
- Parameters:** Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journey person certification in the landscape horticulturist trade.
- Resources:** Please refer to the books and materials listed at Tradesecrets: Trades & Occupations List. If Individual Learning Modules (ILMs) are available for this trade, they can be accessed on LearnAlberta.ca.
- Outcomes:** The student will:

1. apply fertilizer

- 1.1 explain fertilizer selection
- 1.2 explain fertilizer formulations
- 1.3 explain fertilizer analyses
- 1.4 explain nutrient deficiencies
- 1.5 explain fertilizer application methods
- 1.6 develop a landscape fertilization program
- 1.7 perform fertilizer application calculations

2. demonstrate basic competencies

- 2.1 demonstrate fundamental skills to:
 - 2.1.1 communicate
 - 2.1.2 manage information
 - 2.1.3 use numbers
 - 2.1.4 think and solve problems
- 2.2 demonstrate personal management skills to:
 - 2.2.1 demonstrate positive attitudes and behaviours
 - 2.2.2 be responsible
 - 2.2.3 be adaptable
 - 2.2.4 learn continuously
 - 2.2.5 work safely
- 2.3 demonstrate teamwork skills to:
 - 2.3.1 work with others
 - 2.3.2 participate in projects and tasks

3. create a transitional strategy to accommodate personal changes and build personal values

- 3.1 identify short-term and long-term goals
- 3.2 identify steps to achieve goals

COURSE LGA3473: EXTERIOR SOFTSCAPE MAINTENANCE

- Level:** First Period Apprenticeship
- Prerequisite:** LGA3900: Apprenticeship Safety
- Description:** Students perform exterior softscape maintenance.
- Parameters:** Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journey person certification in the landscape horticulturist trade.
- Resources:** Please refer to the books and materials listed at Tradesecrets: Trades & Occupations List. If Individual Learning Modules (ILMs) are available for this trade, they can be accessed on LearnAlberta.ca.

Outcomes: The student will:

- 1. perform exterior softscape maintenance**
 - 1.1 describe visual inspections of plant health
 - 1.2 describe weeding techniques
 - 1.3 describe cultivation techniques
 - 1.4 describe bed-edging techniques
 - 1.5 describe bedding plant maintenance and removal
 - 1.6 describe the use of seasonal protection
 - 1.7 describe harden off practices
- 2. demonstrate basic competencies**
 - 2.1 demonstrate fundamental skills to:
 - 2.1.1 communicate
 - 2.1.2 manage information
 - 2.1.3 use numbers
 - 2.1.4 think and solve problems
 - 2.2 demonstrate personal management skills to:
 - 2.2.1 demonstrate positive attitudes and behaviours
 - 2.2.2 be responsible
 - 2.2.3 be adaptable
 - 2.2.4 learn continuously
 - 2.2.5 work safely
 - 2.3 demonstrate teamwork skills to:
 - 2.3.1 work with others
 - 2.3.2 participate in projects and tasks
- 3. create a transitional strategy to accommodate personal changes and build personal values**
 - 3.1 identify short-term and long-term goals
 - 3.2 identify steps to achieve goals

COURSE LGA3475: LGA PRACTICUM A

Level: First Period Apprenticeship

Prerequisite: None

Description: Students, on the work site, continue to develop and refine those competencies developed in related Career and Technology Studies (CTS) occupational areas, previous practicums, and other experiences.

Parameters: This course should be accessed only by students continuing to work toward attaining a recognized credential offered by an agency external to the school. Practicum courses extend the competencies developed in related CTS occupational areas. The practicum courses may not be delivered as stand-alone courses and may not be combined with core courses. This course may not be used in conjunction with Registered Apprenticeship Program courses. This practicum course may be delivered on- or off-campus. Instruction must be delivered by a qualified teacher with journey person certification or an experienced professional with journey person certification, who is under the supervision of the qualified teacher; both must be authorized to supervise trainees for the external credential.

Outcomes: The student will:

- 1. perform assigned tasks and responsibilities efficiently and effectively, as required by the agency granting credentials**
 - 1.1 identify regulations and regulatory bodies related to the credential
 - 1.2 describe personal roles and responsibilities, including:
 - 1.2.1 key responsibilities
 - 1.2.2 support functions/responsibilities
 - 1.2.3 code of ethics
 - 1.3 describe personal work responsibilities and categorize them as:
 - 1.3.1 routine tasks; e.g., daily, weekly, monthly, yearly
 - 1.3.2 non-routine tasks; e.g., emergencies
 - 1.3.3 tasks requiring personal judgement
 - 1.3.4 tasks requiring approval of a supervisor
- 2. analyze personal performance in relation to established standards**
 - 2.1 evaluate application of competencies developed in related CTS courses
 - 2.2 evaluate standards of performance in terms of:
 - 2.2.1 quality of work
 - 2.2.2 quantity of work
 - 2.3 evaluate adherence to workplace policies and procedures related to health and safety
 - 2.4 evaluate the work environment in terms of:
 - 2.4.1 location
 - 2.4.2 floor plan of work area
 - 2.4.3 analysis of workflow patterns

- 2.5 evaluate a professional in a related occupation in terms of:
 - 2.5.1 training and certification
 - 2.5.2 interpersonal skills
 - 2.5.3 technical skills
 - 2.5.4 professional ethics

3. demonstrate basic competencies

- 3.1 demonstrate fundamental skills to:
 - 3.1.1 communicate
 - 3.1.2 manage information
 - 3.1.3 use numbers
 - 3.1.4 think and solve problems
- 3.2 demonstrate personal management skills to:
 - 3.2.1 demonstrate positive attitudes and behaviours
 - 3.2.2 be responsible
 - 3.2.3 be adaptable
 - 3.2.4 learn continuously
 - 3.2.5 work safely
- 3.3 demonstrate teamwork skills to:
 - 3.3.1 work with others
 - 3.3.2 participate in projects and tasks

COURSE LGA3480: LGA PRACTICUM B

Level: First Period Apprenticeship

Prerequisite: None

Description: Students, on the work site, continue to develop and refine those competencies developed in related Career and Technology Studies (CTS) occupational areas, previous practicums, and other experiences.

Parameters: This course should be accessed only by students continuing to work toward attaining a recognized credential offered by an agency external to the school. Practicum courses extend the competencies developed in related CTS occupational areas. The practicum courses may not be delivered as stand-alone courses and may not be combined with core courses. This course may not be used in conjunction with Registered Apprenticeship Program courses. This practicum course may be delivered on- or off-campus. Instruction must be delivered by a qualified teacher with journeyperson certification or an experienced professional with journeyperson certification, who is under the supervision of the qualified teacher; both must be authorized to supervise trainees for the external credential.

Outcomes: The student will:

- 1. perform assigned tasks and responsibilities efficiently and effectively, as required by the agency granting credentials**
 - 1.1 identify regulations and regulatory bodies related to the credential
 - 1.2 describe personal roles and responsibilities, including:
 - 1.2.1 key responsibilities
 - 1.2.2 support functions/responsibilities
 - 1.2.3 code of ethics
 - 1.3 describe personal work responsibilities and categorize them as:
 - 1.3.1 routine tasks; e.g., daily, weekly, monthly, yearly
 - 1.3.2 non-routine tasks; e.g., emergencies
 - 1.3.3 tasks requiring personal judgement
 - 1.3.4 tasks requiring approval of a supervisor
- 2. analyze personal performance in relation to established standards**
 - 2.1 evaluate application of competencies developed in related CTS courses
 - 2.2 evaluate standards of performance in terms of:
 - 2.2.1 quality of work
 - 2.2.2 quantity of work
 - 2.3 evaluate adherence to workplace policies and procedures related to health and safety
 - 2.4 evaluate the work environment in terms of:
 - 2.4.1 location
 - 2.4.2 floor plan of work area
 - 2.4.3 analysis of workflow patterns

- 2.5 evaluate a professional in a related occupation in terms of:
 - 2.5.1 training and certification
 - 2.5.2 interpersonal skills
 - 2.5.3 technical skills
 - 2.5.4 professional ethics

3. demonstrate basic competencies

- 3.1 demonstrate fundamental skills to:
 - 3.1.1 communicate
 - 3.1.2 manage information
 - 3.1.3 use numbers
 - 3.1.4 think and solve problems
- 3.2 demonstrate personal management skills to:
 - 3.2.1 demonstrate positive attitudes and behaviours
 - 3.2.2 be responsible
 - 3.2.3 be adaptable
 - 3.2.4 learn continuously
 - 3.2.5 work safely
- 3.3 demonstrate teamwork skills to:
 - 3.3.1 work with others
 - 3.3.2 participate in projects and tasks

COURSE LGA3485: LGA PRACTICUM C

Level: First Period Apprenticeship

Prerequisite: None

Description: Students, on the work site, continue to develop and refine those competencies developed in related Career and Technology Studies (CTS) occupational areas, previous practicums, and other experiences.

Parameters: This course should be accessed only by students continuing to work toward attaining a recognized credential offered by an agency external to the school. Practicum courses extend the competencies developed in related CTS occupational areas. The practicum courses may not be delivered as stand-alone courses and may not be combined with core courses. This course may not be used in conjunction with Registered Apprenticeship Program courses. This practicum course may be delivered on- or off-campus. Instruction must be delivered by a qualified teacher with journeyperson certification or an experienced professional with journeyperson certification, who is under the supervision of the qualified teacher; both must be authorized to supervise trainees for the external credential.

Outcomes: The student will:

- 1. perform assigned tasks and responsibilities efficiently and effectively, as required by the agency granting credentials**
 - 1.1 identify regulations and regulatory bodies related to the credential
 - 1.2 describe personal roles and responsibilities, including:
 - 1.2.1 key responsibilities
 - 1.2.2 support functions/responsibilities
 - 1.2.3 code of ethics
 - 1.3 describe personal work responsibilities and categorize them as:
 - 1.3.1 routine tasks; e.g., daily, weekly, monthly, yearly
 - 1.3.2 non-routine tasks; e.g., emergencies
 - 1.3.3 tasks requiring personal judgement
 - 1.3.4 tasks requiring approval of a supervisor
- 2. analyze personal performance in relation to established standards**
 - 2.1 evaluate application of competencies developed in related CTS courses
 - 2.2 evaluate standards of performance in terms of:
 - 2.2.1 quality of work
 - 2.2.2 quantity of work
 - 2.3 evaluate adherence to workplace policies and procedures related to health and safety
 - 2.4 evaluate the work environment in terms of:
 - 2.4.1 location
 - 2.4.2 floor plan of work area
 - 2.4.3 analysis of workflow patterns

- 2.5 evaluate a professional in a related occupation in terms of:
 - 2.5.1 training and certification
 - 2.5.2 interpersonal skills
 - 2.5.3 technical skills
 - 2.5.4 professional ethics

3. demonstrate basic competencies

- 3.1 demonstrate fundamental skills to:
 - 3.1.1 communicate
 - 3.1.2 manage information
 - 3.1.3 use numbers
 - 3.1.4 think and solve problems
- 3.2 demonstrate personal management skills to:
 - 3.2.1 demonstrate positive attitudes and behaviours
 - 3.2.2 be responsible
 - 3.2.3 be adaptable
 - 3.2.4 learn continuously
 - 3.2.5 work safely
- 3.3 demonstrate teamwork skills to:
 - 3.3.1 work with others
 - 3.3.2 participate in projects and tasks

COURSE LGA3490: LGA PRACTICUM D

Level: First Period Apprenticeship

Prerequisite: None

Description: Students, on the work site, continue to develop and refine those competencies developed in related Career and Technology Studies (CTS) occupational areas, previous practicums, and other experiences.

Parameters: This course should be accessed only by students continuing to work toward attaining a recognized credential offered by an agency external to the school. Practicum courses extend the competencies developed in related CTS occupational areas. The practicum courses may not be delivered as stand-alone courses and may not be combined with core courses. This course may not be used in conjunction with Registered Apprenticeship Program courses. This practicum course may be delivered on- or off-campus. Instruction must be delivered by a qualified teacher with journey person certification or an experienced professional with journey person certification, who is under the supervision of the qualified teacher; both must be authorized to supervise trainees for the external credential.

Outcomes: The student will:

- 1. perform assigned tasks and responsibilities efficiently and effectively, as required by the agency granting credentials**
 - 1.1 identify regulations and regulatory bodies related to the credential
 - 1.2 describe personal roles and responsibilities, including:
 - 1.2.1 key responsibilities
 - 1.2.2 support functions/responsibilities
 - 1.2.3 code of ethics
 - 1.3 describe personal work responsibilities and categorize them as:
 - 1.3.1 routine tasks; e.g., daily, weekly, monthly, yearly
 - 1.3.2 non-routine tasks; e.g., emergencies
 - 1.3.3 tasks requiring personal judgement
 - 1.3.4 tasks requiring approval of a supervisor
- 2. analyze personal performance in relation to established standards**
 - 2.1 evaluate application of competencies developed in related CTS courses
 - 2.2 evaluate standards of performance in terms of:
 - 2.2.1 quality of work
 - 2.2.2 quantity of work
 - 2.3 evaluate adherence to workplace policies and procedures related to health and safety
 - 2.4 evaluate the work environment in terms of:
 - 2.4.1 location
 - 2.4.2 floor plan of work area
 - 2.4.3 analysis of workflow patterns

- 2.5 evaluate a professional in a related occupation in terms of:
 - 2.5.1 training and certification
 - 2.5.2 interpersonal skills
 - 2.5.3 technical skills
 - 2.5.4 professional ethics

3. demonstrate basic competencies

- 3.1 demonstrate fundamental skills to:
 - 3.1.1 communicate
 - 3.1.2 manage information
 - 3.1.3 use numbers
 - 3.1.4 think and solve problems
- 3.2 demonstrate personal management skills to:
 - 3.2.1 demonstrate positive attitudes and behaviours
 - 3.2.2 be responsible
 - 3.2.3 be adaptable
 - 3.2.4 learn continuously
 - 3.2.5 work safely
- 3.3 demonstrate teamwork skills to:
 - 3.3.1 work with others
 - 3.3.2 participate in projects and tasks

COURSE LGA3900: APPRENTICESHIP SAFETY

Level: First Period Apprenticeship

Prerequisite: None

Description: Students develop the knowledge and skills required to maintain a personal health and safety plan; identify the steps for obtaining a journey person certificate; and describe how to apply legislation, regulations, and practices of the industry.

Parameters: Access to a material work centre, complete with basic landscape horticulture tools and materials, and to instruction from an individual with journey person certification in the landscape horticulturist trade.

Outcomes: The student will:

1. apply legislation, regulations, and practices ensuring safe work in the landscape horticulturist trade

- 1.1 demonstrate the application of the *Occupational Health and Safety Act, Regulation, and Code*
- 1.2 describe the employer's and employee's role with Occupational Health and Safety (OH&S) regulations, Worksite Hazardous Materials Information Systems (WHMIS), fire regulations, Workers' Compensation Board regulations, and related advisory bodies and agencies
- 1.3 describe industry practices for hazard assessment and control procedures
- 1.4 describe the responsibilities of workers and employers to apply emergency procedures
- 1.5 describe tradesperson attitudes with respect to housekeeping, personal protective equipment (PPE), and emergency procedures
- 1.6 describe the roles and responsibilities of employers and employees with the selection and use of PPE
- 1.7 select, use, and maintain appropriate PPE for worksite applications
- 1.8 use required PPE for tasks

2. use industry standard practices for climbing, lifting, rigging, and hoisting in the landscape horticulturist trade

- 2.1 describe manual lifting procedures
- 2.2 describe rigging hardware and associated safety factors
- 2.3 describe workplace ergonomics
- 2.4 describe selecting equipment for rigging loads
- 2.5 describe hoisting and load moving procedures
- 2.6 describe maintenance of PPE for climbing, lifting, and load moving equipment maintenance
- 2.7 describe PPE for climbing, lifting, and load moving equipment

3. apply industry standard practices for hazardous materials and fire protection in the landscape horticulturist trade

- 3.1 describe roles, responsibilities, features, and practices related to the WHMIS program
- 3.2 describe three key elements of WHMIS
- 3.3 describe handling, storing, and transporting procedures for hazardous material
- 3.4 describe venting procedures when working with hazardous materials
- 3.5 describe hazards, classes, procedures, and equipment related to fire protection
- 3.6 describe cleanup procedures for hazardous materials

- 4. manage an apprenticeship to earn journeyperson certification**
 - 4.1 describe the contractual responsibilities of the apprentice, employer, and Alberta Apprenticeship and Industry Training
 - 4.2 describe the purpose of the apprentice record book
 - 4.3 describe the procedure for changing employers during an active apprenticeship
 - 4.4 describe the purpose of the course outline
 - 4.5 describe the procedure for progressing through an apprenticeship
 - 4.6 describe advancement opportunities in this trade
 - 4.7 describe responsibilities for practitioners of the landscape horticulturist trade
- 5. use communication strategies**
 - 5.1 describe non-verbal communication strategies and techniques
 - 5.2 describe verbal communication strategies and techniques
 - 5.3 describe interpersonal communication principles to build and maintain relationships
 - 5.4 describe gender and ethnic awareness when communicating
 - 5.5 develop industry-specific written documents
 - 5.6 demonstrate communication strategies and techniques
- 6. demonstrate basic competencies**
 - 6.1 demonstrate fundamental skills to:
 - 6.1.1 communicate
 - 6.1.2 manage information
 - 6.1.3 use numbers
 - 6.1.4 think and solve problems
 - 6.2 demonstrate personal management skills to:
 - 6.2.1 demonstrate positive attitudes and behaviours
 - 6.2.2 be responsible
 - 6.2.3 be adaptable
 - 6.2.4 learn continuously
 - 6.2.5 work safely
 - 6.3 demonstrate teamwork skills to:
 - 6.3.1 work with others
 - 6.3.2 participate in projects and tasks
- 7. create a transitional strategy to accommodate personal changes and build personal values**
 - 7.1 identify short-term and long-term goals
 - 7.2 identify steps to achieve goals