

## WTCS Repository

# Program Design

50-001-1 ARBORIST APPRENTICE

Description

Urban forestry combines the science of arboriculture with the practical disciplines related to tree planting; tree care and protection, and the overall management of trees as a natural resource. Arborists are the skilled workers who perform the related job duties and tasks. The urban environment can present many arboricultural challenges such as limited root and canopy space, poor soil quality, deficiency or excess of water and light, heat, pollution, mechanical and chemical damage to trees, and mitigation of tree-related hazards. Arboriculture is a related science for this occupation and trade. Arborists are individuals trained in the art and science of planting, caring for, and maintaining individual trees.   
  
Arborists are knowledgeable about the needs of trees and are trained and equipped to provide proper care. Well-cared-for trees are attractive and can add considerable value to your property. Poorly maintained trees can be a significant liability. Pruning or removing trees, especially large trees, can be dangerous work. Tree work should be done only by those trained and equipped to work safely in trees. Certified Arborists are individuals who have achieved a level of knowledge in the art and science of tree care through experience and by passing a comprehensive examination developed by some of the nation’s leading experts on tree care.   
  
Tree Trimmers and Pruners are a related occupation (www.bls.gov) and use sophisticated climbing and rigging techniques, cut away dead or excess branches from trees or shrubs to maintain right-of-way for roads, sidewalks, or utilities, or to improve appearance, health, and value of tree. Tree care standards pertaining to integrated vegetation management guide the work done by this occupation. These workers prune or treat trees or shrubs using handsaws, hand pruners, clippers, and power pruners. Works off the ground in the tree canopy and may use truck-mounted lifts.

External Requirements

* BAS Exhibit A Work Processes
* BAS Apprenticeship job books and related training standards
* Other requirements set forth by a state trade committee
* Employer required licenses and certifications: (CDL, CPR, First Aid, aerial lift & other equipment certifications, state pesticide applicator, etc.)
* Transition to Trainer course in the last year of the apprenticeship

Entry Requirements

Employed by a qualified employer  
Ability to perform the work  
Other trade entrance requirements  
Other entrance requirements approved by Wisconsin DWD-BAS

External Standards

|  |  |
| --- | --- |
| Title | Arborist & Urban Forestry DACUM |
| Sponsoring Organization | WTCS & DWD-BAS |

Urban Forestry (Arborist) DACUM  
Sponsoring Organizations: Date of DACUM  
08/20/14  
Wisconsin Department of Workforce Development  Bureau of Apprenticeship Standards Organized by:  
Mid-State Technical College  
and the Hosted by:  
Gateway Technical College  
Wisconsin Technical College System  
with support from the  
Wisconsin Arborist Association Facilitated by:  
Hal Zenisek, DACUM Facilitator,   
Wisconsin Technical College System Foundation

**DACUM Panel of Experts**  
Name Job Title Company City  
Bob Gansemer General Manager Buckley Tree Care Mequon  
Tim Harris President Buckley Tree Care New Berlin  
Randy Krouse Urban Forestry District Manager City of Milwaukee Forestry Services Milwaukee  
Adam Alves Arborist Dane Co. Land & Water Madison  
August Hoppe President Hoppe Tree Service Milwaukee  
John Paul Sanborn Owner/Operator Sanborn’s Services Franklin  
Evan Slocum Exec. Director Urban Tree Alliance Madison  
Holly Zart Arborist Wachtel Tree Science Merton  
Brian Wahl Reg. Urban Forester WI DNR Fitchburg

### Program Outcomes

|  |  |
| --- | --- |
|  | Adhere to safe work practices |
|  | Operate equipment |
|  | Maintain equipment |
|  | Prune trees and shrubs |
|  | Remove trees and shrubs |
|  | Establish trees and shrubs |
|  | Assess trees to mitigate risks |
|  | Apply plant health care treatments |
|  | Demonstrate core ability skills required for the trade |

### Program Configurations

## 50-001-1 WTCS Arborist Apprenticeship Related Instruction [2015-2016]

Description

This program configuration model outlines a sequence of courses and curriculum standards for related instruction in the Arborist Apprenticeship. The model outlines the equivalent of 6 semesters of related instruction coursework for a total of 432 hours plus the Transition to Trainer course. The apprenticeship is 42-month, and 3.5 years long.   
  
Instructional activities may include presentation, discussion, hands-on learning in shop style courses, and small group activities designed by the instructor.  Courses listed below were designed for a combination of block scheduling and traditional semesters during the school year and summer. The program configuration model aligns with a DACUM which was conducted and validated by the trade in 2014. The program configuration model aligns common course numbers, credits, hours, and descriptions that colleges can use across the WTCS in the future. The maximum number of both course credits and course hours are provided for WTCS reporting and BAS record keeping.   
  
This model also aligns with the ISA Certified Tree Worker Climber Specialist credential by adding a capstone project in the final semester of related instruction. Curriculum introduces knowledge, skills and abilities related to tree cabling and protection systems during related instruction which would be demonstrated by apprentices during the capstone project. Other capstone projects may be approved in the future.

Credits

|  |  |
| --- | --- |
| Total Credits | 12 |

## Related Instruction Year 1

|  |  |  |
| --- | --- | --- |
| Course # | Course Title | Credits |
| 50-001-710 | Arborist Skills 1 | 1 |
| 50-001-711 | Arborist Equipment Fundamentals | 1 |
| 50-001-712 | Introduction to Aerial Tree Work | 1 |
| 50-001-713 | Applied Aerial Work for Arborist Apprentices | 1 |

## Related Instruction Year 2

|  |  |  |
| --- | --- | --- |
| Course # | Course Title | Credits |
| 50-001-714 | Tree and Shrub Identification 1 for Arborist Apprentices | 1 |
| 50-001-715 | Arborist Skills 2 | 1 |
| 50-001-717 | Rigging and Tree Removal Fundamentals for Arborist Apprentices | 1 |
| 50-001-718 | Tree Biology & Identification 2 for Arborist Apprentices | 1 |

## Related Instruction Year 3

|  |  |  |
| --- | --- | --- |
| Course # | Course Title | Credits |
| 50-001-719 | Arborist Skills 3 | 1 |
| 50-001-720 | Advanced Rigging and Tree Felling for Arborist Apprentices | 1 |
| 50-001-722 | Plant Health Care Treatments & Shrub Identification 3 for Arborist Apprentices | 1 |

## Related Instruction Year 4

|  |  |  |
| --- | --- | --- |
| Course # | Course Title | Credits |
| 50-001-723 | Leadership in Tree Care Operations, Communication Skills, and Capstone Project | 1 |
| 47-455-455 | Transition to Trainer: Your Role as a Journey Worker |  |

## Related Instruction Term (Other)

|  |  |  |
| --- | --- | --- |
| Course # | Course Title | Credits |
| varies | State Pesticide Applicator License, Safety, CPR, First Aid, AED, CDL, and other employer required training or certifications |  |

### Program Course List

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Number | Title | Credits | Description | Pre/Corequisites |
| 50-001-710 | Arborist Skills 1 | 1 | Apprentices will examine aspects of being an arborist and the trade and occupations related to urban forestry. Course learning outcomes include an orientation to the trade, standards related to the tree care industry, safety and personal protective equipment, electrical hazard awareness; ground support for aerial operations, basic tree biology for first year apprentices, and the basic pruning cuts used by the trade. |  |
| 50-001-711 | Arborist Equipment Fundamentals | 1 | Course learning outcomes include skill building with common equipment used by the trade. Chain saws, chippers, vehicle operations, plant health care, and aerial lift operations will be learned. Equipment maintenance is examined. Safety and safe work practices are reinforced. |  |
| 50-001-712 | Introduction to Aerial Tree Work | 1 | Course competencies include pre-aerial tree work inspection, climbing equipment for safety, rope installations, ascending skills, re-positioning skills, maneuvering techniques, and descending skills. Apprentices will build skills selecting knots for various situations and applications.  Emergency response procedures for arborist apprentices will be explored, and aerial rescue basic concepts are introduced in this course. |  |
| 50-001-713 | Applied Aerial Work for Arborist Apprentices | 1 | Apprentices will develop skills involved in aerial work performed by arborists. Course competencies include safety work practices, operating chain saws in an aerial situation; performing pruning cuts at heights, rigging loads during aerial work, climbing in spurs and decision-making for aerial pruning cuts and tree care. Aerial rescue training for arborist apprentices is included in this course. |  |
| 50-001-714 | Tree and Shrub Identification 1 for Arborist Apprentices | 1 | Course examines tree and shrub identification using industry accepted standards. Course learning outcomes include anatomy and morphology, tree and shrub identification, and tools used by the trade to identify trees and shrubs. An introduction to insects and diseases will provide foundational knowledge for future courses in related instruction. The first tree & shrub identification course (1 of 3) will focus on deciduous and coniferous trees from the arborist apprenticeship must-know list. |  |
| 50-001-715 | Arborist Skills 2 | 1 | Arborist skills for second year apprentices will examine the ANSI A-300 tree care standards and apply those standards to various tree care situations. Apprentices will learn how to assess different trees for pruning needs; evaluate when and where to make cuts; demonstrate basic pruning cuts used by the trade; compare commercial, municipal, and utility applications for pruning; and relate pruning needs for specific trees.  Course helps prepare apprentices for future coursework in the 2nd year of related instruction. |  |
| 50-001-717 | Rigging and Tree Removal Fundamentals for Arborist Apprentices | 1 | Apprentices will explore concepts and develop skills related to tree removal and rigging. Course learning outcomes include safe climbing, safe tree removal, basic felling skills, rigging loads, using ropes and rigging systems, and performing ground work associated with tree removal. |  |
| 50-001-718 | Tree Biology & Identification 2 for Arborist Apprentices | 1 | Apprentices will examine tree biology and relate concepts to the work performed by arborists in an urban forestry setting. Course competencies include understanding tree function and structure, categorizing the impact of diseases and pests, examining the CODIT model, and exploring tree risk concepts. Course will examine basic plant health needs, tree sites, and nutrition and soil requirements. The second of 3 tree and shrub identification courses will focus on more coniferous and deciduous trees from the arborist apprenticeship must-know list, and explore associated tree and shrub disorders. |  |
| 50-001-719 | Arborist Skills 3 | 1 | Arborist skills for third year apprentices will examine light rigging systems and then examine hazards associated with working in trees.  Methods for identifying branch failure risks, and strategies for assessing and mitigating tree risks will be explored. Course learning outcomes include examining tree support and protection systems, identifying signs and symptoms of decay, and applying the CODIT model to tree defects. Course prepares apprentices for additional coursework in the third year of related instruction. |  |
| 50-001-720 | Advanced Rigging and Tree Felling for Arborist Apprentices | 1 | Course provides skill development for arborist apprentices related to tree felling and field skills associated with working outside. Competencies include specialized knots and equipment used in rigging applications; making aerial pruning cuts in accordance with tree care standards; tree felling and field work associated with the occupation. Key concepts and safety related to wood under tension will be introduced in this course. |  |
| 50-001-722 | Plant Health Care Treatments & Shrub Identification 3 for Arborist Apprentices | 1 | Apprentices will explore plant health care management by examining treatment options and prescriptions. Course learning outcomes will examine PHC options, examine integrated pest management; and build skills handling chemicals, operating equipment, and applying treatments. Course will compare specialized equipment used by arborists for plant health care. The course will also explore amending soils and responding to tree damage from construction. Integrated vegetation management standards will be reviewed. Additional tree and shrub disorders will be identified and diagnosed. The third of 3 tree and shrub identification courses will focus on identifying both evergreen and deciduous woody shrubs in the field. Apprentices will be prepared to sit for the Wisconsin Pesticide Certification 3.0 Turf and Landscape, or equivalent, upon completion of this course. |  |
| 50-001-723 | Leadership in Tree Care Operations, Communication Skills, and Capstone Project | 1 | Arborist apprentices will prepare for post-apprenticeship work duties and examine key job duties and tasks associated with tree care operations, communications, planning, and leadership. Course learning outcomes include training others, setting up job sites, managing resources, reporting work performed, and applying communication and interpersonal skills to various situations. Apprentices will build skills interpreting written work orders/plans, and applying leadership skills to solve problems. A skill-based project to plan a tree cabling project for a given situation/scenario will help apprentices prepare for the ISA tree climber specialist certification knowledge-based and skill-based exams and serves as a capstone project for their apprenticeship. |  |
| 47-455-455 | Transition to Trainer: Your Role as a Journey Worker |  | Apprenticeship training is a collaborative partnership: employer and employee associations, government, and educational institutions each play a part. In reality, most learning takes place through the daily interaction between an apprentice and his/her co-workers. Surveys have shown that the apprentices are least satisfied with the on-the-job portion of their training--particularly the ability of journey level workers and supervisors to pass on their knowledge of the trade.   You have already learned to use the tools of your chosen trade. In this workshop you will be introduced to a new set of basic tools--the tools of a jobsite trainer. You will explore the skills that are necessary to be an effective trainer, discover how to deliver hands-on training, and examine the process for giving useful feedback. During the workshop you will build a Training Toolkit to take back to your work on the job. |  |

50-001-710 Arborist Skills 1

# Course Outcome Summary

### Course Information

|  |  |  |
| --- | --- | --- |
|  | Description | Apprentices will examine aspects of being an arborist and the trade and occupations related to urban forestry. Course learning outcomes include an orientation to the trade, standards related to the tree care industry, safety and personal protective equipment, electrical hazard awareness; ground support for aerial operations, basic tree biology for first year apprentices, and the basic pruning cuts used by the trade. |
|  | Instructional Level | Technical Diploma |
|  | Total Credits | 1 |
|  | Total Hours | 36 |

### Course Competencies

|  |  |
| --- | --- |
| 1. | Complete an orientation to the trade and occupation |
| 2. | Apply ANSI Z-133 to arborists and the tree care industry |
| 3. | Use personal protective equipment properly |
| 4. | Interpret basic electrical hazard awareness |
| 5. | Support aerial operations from the ground |
| 6. | Examine basic tree biology |
| 7. | Demonstrate skills performing the basic pruning cuts |

50-001-711 Arborist Equipment Fundamentals

# Course Outcome Summary

### Course Information

|  |  |  |
| --- | --- | --- |
|  | Description | Course learning outcomes include skill building with common equipment used by the trade. Chain saws, chippers, vehicle operations, plant health care, and aerial lift operations will be learned. Equipment maintenance is examined. Safety and safe work practices are reinforced. |
|  | Instructional Level | Technical Diploma |
|  | Total Credits | 1 |
|  | Total Hours | 36 |

### Course Competencies

|  |  |
| --- | --- |
| 1. | Operate chain saws safely |
| 2. | Perform basic maintenance of chain saws according to manufacturer's specifications |
| 3. | Apply chain saw operations to ground work |
| 4. | Operate chippers safely |
| 5. | Perform basic maintenance of chippers according to manufacturer's specifications |
| 6. | Investigate aerial lifts used by the trade |
| 7. | Explore vehicle operations |
| 8. | Investigate plant health care equipment used by arborists |

50-001-712 Introduction to Aerial Tree Work

# Course Outcome Summary

### Course Information

|  |  |  |
| --- | --- | --- |
|  | Description | Course competencies include pre-aerial tree work inspection, climbing equipment for safety, rope installations, ascending skills, re-positioning skills, maneuvering techniques, and descending skills. Apprentices will build skills selecting knots for various situations and applications.  Emergency response procedures for arborist apprentices will be explored, and aerial rescue basic concepts are introduced in this course. |
|  | Instructional Level | Technical Diploma |
|  | Total Credits | 1 |
|  | Total Hours | 36 |

### Course Competencies

|  |  |
| --- | --- |
| 1. | Perform pre-aerial tree work inspection |
| 2. | Demonstrate rope installation techniques for getting into trees |
| 3. | Demonstrate ascending skills |
| 4. | Demonstrate re-positioning techniques |
| 5. | Demonstrate maneuvering techniques |
| 6. | Demonstrate descending skills |
| 7. | Select basic climbing knots for various applications |
| 8. | Explore emergency response procedures for arborists |

50-001-713 Applied Aerial Work for Arborist Apprentices

# Course Outcome Summary

### Course Information

|  |  |  |
| --- | --- | --- |
|  | Description | Apprentices will develop skills involved in aerial work performed by arborists. Course competencies include safety work practices, operating chain saws in an aerial situation; performing pruning cuts at heights, rigging loads during aerial work, climbing in spurs and decision-making for aerial pruning cuts and tree care. Aerial rescue training for arborist apprentices is included in this course. |
|  | Instructional Level | Technical Diploma |
|  | Total Credits | 1 |
|  | Total Hours | 36 |

### Course Competencies

|  |  |
| --- | --- |
| 1. | Demonstrate safe work practices and proper use of PPE |
| 2. | Operate chain saws in aerial situations |
| 3. | Perform pruning cuts in an aerial setting |
| 4. | Use introductory overhead [rigging from above & static] rigging techniques for aerial work operations in a shop/classroom setting |
| 5. | Demonstrate climbing in spurs |
| 6. | Examine ground support operations for aerial work |
| 7. | Demonstrate aerial rescue techniques |
| 8. | Compare approaches to tree cabling, bracing, and support systems |

50-001-714 Tree and Shrub Identification 1 for Arborist Apprentices

# Course Outcome Summary

### Course Information

|  |  |  |
| --- | --- | --- |
|  | Description | Course examines tree and shrub identification using industry accepted standards. Course learning outcomes include anatomy and morphology, tree and shrub identification, and tools used by the trade to identify trees and shrubs. An introduction to insects and diseases will provide foundational knowledge for future courses in related instruction. The first tree & shrub identification course (1 of 3) will focus on deciduous and coniferous trees from the arborist apprenticeship must-know list. |
|  | Instructional Level | Technical Diploma |
|  | Total Credits | 1 |
|  | Total Hours | 36 |

### Course Competencies

|  |  |
| --- | --- |
| 1. | Classify plants and trees using industry accepted methods |
| 2. | Relate tree and shrub anatomy and morphology to identification |
| 3. | Use resources for tree and shrub identification |
| 4. | Explore basic concepts related to plant health care management |
| 5. | Compare biotic and abiotic diseases and disorders |
| 6. | Identify selected deciduous and coniferous trees from the arborist apprenticeship must-know list |

50-001-715 Arborist Skills 2

# Course Outcome Summary

### Course Information

|  |  |  |
| --- | --- | --- |
|  | Description | Arborist skills for second year apprentices will examine the ANSI A-300 tree care standards and apply those standards to various tree care situations. Apprentices will learn how to assess different trees for pruning needs; evaluate when and where to make cuts; demonstrate basic pruning cuts used by the trade; compare commercial, municipal, and utility applications for pruning; and relate pruning needs for specific trees.  Course helps prepare apprentices for future coursework in the 2nd year of related instruction. |
|  | Instructional Level | Technical Diploma |
|  | Total Credits | 1 |
|  | Total Hours | 36 |

### Course Competencies

|  |  |
| --- | --- |
| 1. | Examine pruning and be introduced to tree care operations found in the ANSI A-300 standards |
| 2. | Apply the A-300 standards/objectives to various situations |
| 3. | Evaluate pruning concepts |
| 4. | Compare different trees for pruning needs |
| 5. | Demonstrate pruning cuts used by the trade |
| 6. | Compare commercial, municipal, and utility applications for pruning |
| 7. | Determine pruning needs for specific shrubs identified by the instructor or trade |

50-001-717 Rigging and Tree Removal Fundamentals for Arborist Apprentices

# Course Outcome Summary

### Course Information

|  |  |  |
| --- | --- | --- |
|  | Description | Apprentices will explore concepts and develop skills related to tree removal and rigging. Course learning outcomes include safe climbing, safe tree removal, basic felling skills, rigging loads, using ropes and rigging systems, and performing ground work associated with tree removal. |
|  | Instructional Level | Technical Diploma |
|  | Total Credits | 1 |
|  | Total Hours | 36 |

### Course Competencies

|  |  |
| --- | --- |
| 1. | Demonstrate safe climbing skills |
| 2. | Apply safe tree removal practices to various situations |
| 3. | Remove trees while working aloft |
| 4. | Demonstrate basic tree felling skills |
| 5. | Rig loads safely |
| 6. | Use ropes, rigging hardware and rigging systems for various situations |
| 7. | Perform ground work associated with tree removal. |

50-001-718 Tree Biology & Identification 2 for Arborist Apprentices

# Course Outcome Summary

### Course Information

|  |  |  |
| --- | --- | --- |
|  | Description | Apprentices will examine tree biology and relate concepts to the work performed by arborists in an urban forestry setting. Course competencies include understanding tree function and structure, categorizing the impact of diseases and pests, examining the CODIT model, and exploring tree risk concepts. Course will examine basic plant health needs, tree sites, and nutrition and soil requirements. The second of 3 tree and shrub identification courses will focus on more coniferous and deciduous trees from the arborist apprenticeship must-know list, and explore associated tree and shrub disorders. |
|  | Instructional Level | Technical Diploma |
|  | Total Credits | 1 |
|  | Total Hours | 36 |

### Course Competencies

|  |  |
| --- | --- |
| 1. | Relate biology and botany principles to trees |
| 2. | Apply tree function and structure to tree growth |
| 3. | Categorize the impact of diseases and pests on trees |
| 4. | Examine the CODIT model as it relates to tree biology and plant health care management |
| 5. | Correlate basic soil types, water, and nutritional concepts to plant health needs |
| 6. | Assess tree sites and soil requirements for a variety of trees |
| 7. | Explore common tree and shrub disorders |
| 8. | Identify selected deciduous and coniferous trees from the arborist apprenticeship must-know list |

50-001-719 Arborist Skills 3

# Course Outcome Summary

### Course Information

|  |  |  |
| --- | --- | --- |
|  | Description | Arborist skills for third year apprentices will examine light rigging systems and then examine hazards associated with working in trees.  Methods for identifying branch failure risks, and strategies for assessing and mitigating tree risks will be explored. Course learning outcomes include examining tree support and protection systems, identifying signs and symptoms of decay, and applying the CODIT model to tree defects. Course prepares apprentices for additional coursework in the third year of related instruction. |
|  | Total Credits | 1 |
|  | Total Hours | 36 |

### Course Competencies

|  |  |
| --- | --- |
| 1. | Examine introductory concepts related to light duty rigging |
| 2. | Classify potential hazards associated with working in trees |
| 3. | Summarize methods for recognizing branch failure risks |
| 4. | Compare strategies for assessing tree risks |
| 5. | Analyze signs and symptoms associated with tree and shrub decay |
| 6. | Apply the CODIT model to tree defects |
| 7. | Explore techniques arborists can use to mitigate tree risks |
| 8. | Compare tree support and protection systems |

50-001-720 Advanced Rigging and Tree Felling for Arborist Apprentices

# Course Outcome Summary

### Course Information

|  |  |  |
| --- | --- | --- |
|  | Description | Course provides skill development for arborist apprentices related to tree felling and field skills associated with working outside. Competencies include specialized knots and equipment used in rigging applications; making aerial pruning cuts in accordance with tree care standards; tree felling and field work associated with the occupation. Key concepts and safety related to wood under tension will be introduced in this course. |
|  | Instructional Level | Technical Diploma |
|  | Total Credits | 1 |
|  | Total Hours | 36 |

### Course Competencies

|  |  |
| --- | --- |
| 1. | Apply field-based decision-making for aerial pruning cuts and tree care |
| 2. | Demonstrate techniques for using specialized rigging systems |
| 3. | Demonstrate tree felling skills for a variety of situations |
| 4. | Apply arborist field skills related to working outside and in a variety of settings |
| 5. | Analyze principles related to wood under tension |

50-001-722 Plant Health Care Treatments & Shrub Identification 3 for Arborist Apprentices

# Course Outcome Summary

### Course Information

|  |  |  |
| --- | --- | --- |
|  | Description | Apprentices will explore plant health care management by examining treatment options and prescriptions. Course learning outcomes will examine PHC options, examine integrated pest management; and build skills handling chemicals, operating equipment, and applying treatments. Course will compare specialized equipment used by arborists for plant health care. The course will also explore amending soils and responding to tree damage from construction. Integrated vegetation management standards will be reviewed. Additional tree and shrub disorders will be identified and diagnosed. The third of 3 tree and shrub identification courses will focus on identifying both evergreen and deciduous woody shrubs in the field. Apprentices will be prepared to sit for the Wisconsin Pesticide Certification 3.0 Turf and Landscape, or equivalent, upon completion of this course. |
|  | Instructional Level | Technical Diploma |
|  | Total Credits | 1 |
|  | Total Hours | 36 |

### Course Competencies

|  |  |
| --- | --- |
| 1. | Assist with performing integrated pest management |
| 2. | Use plant health care chemicals |
| 3. | Apply plant health care treatments using specialized equipment, machines and methods |
| 4. | Describe techniques arborists can use to amend soils |
| 5. | Plan for treating tree damage caused by construction |
| 6. | Relate applicable tree care standards to integrated vegetation management |
| 7. | Explore additional tree and shrub disorders found in the area |
| 8. | Identify the genus and species of selected deciduous and coniferous shrubs from the arborist apprenticeship must-know list |
| 9. | Apply plant health care principles to trees and shrubs |

50-001-723 Leadership in Tree Care Operations, Communication Skills, and Capstone Project

# Course Outcome Summary

### Course Information

|  |  |  |
| --- | --- | --- |
|  | Description | Arborist apprentices will prepare for post-apprenticeship work duties and examine key job duties and tasks associated with tree care operations, communications, planning, and leadership. Course learning outcomes include training others, setting up job sites, managing resources, reporting work performed, and applying communication and interpersonal skills to various situations. Apprentices will build skills interpreting written work orders/plans and applying leadership skills to solve problems. A skill-based project to plan a tree cabling project for a given situation/scenario will help apprentices prepare for the ISA tree climber specialist certification knowledge-based and skill-based exams and serves as a capstone project for their apprenticeship. |
|  | Instructional Level | Technical Diploma |
|  | Total Credits | 1 |
|  | Total Hours | 36 |

### Course Competencies

|  |  |
| --- | --- |
| 1. | Train crew members on safe work practices |
| 2. | Train crew members on technical work processes |
| 3. | Plan work for crews and given assignments |
| 4. | Report work performed |
| 5. | Communicate with clients, crew, and company |
| 6. | Apply crew leadership skills to various situations |
| 7. | Plan a tree cabling system project in response to a given situation or scenario |

47-455-455 Transition to Trainer: Your Role as a Journey Worker

# Course Outcome Summary

### Course Information

|  |  |  |
| --- | --- | --- |
|  | Description | Apprenticeship training is a collaborative partnership: employer and employee associations, government, and educational institutions each play a part. In reality, most learning takes place through the daily interaction between an apprentice and his/her co-workers. Surveys have shown that the apprentices are least satisfied with the on-the-job portion of their training--particularly the ability of journey level workers and supervisors to pass on their knowledge of the trade.   You have already learned to use the tools of your chosen trade. In this workshop you will be introduced to a new set of basic tools--the tools of a jobsite trainer. You will explore the skills that are necessary to be an effective trainer, discover how to deliver hands-on training, and examine the process for giving useful feedback. During the workshop you will build a Training Toolkit to take back to your work on the job. |
|  | Total Hours | 8 |

### Course Competencies

|  |  |
| --- | --- |
| 1. | Value your role as a journey worker trainer |
| 2. | Serve as a mentor and job coach |
| 3. | Foster a positive work environment by acting as an ally/advocate |
| 4. | Provide hands-on skills training |
| 5. | Provide feedback on apprentice performance |