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ABSTRACT

Developed through a modified DACUM (Developing a Curriculum) process involving business, industry, labor, and community agency representatives in Ohio, this document is a comprehensive and verified employer competency profile for turf and landscape occupations. The list contains units (with and without subunits), competencies, and competency builders that identify the skills needed to enter these occupations. The occupational, academic, and employability skills for this occupation or occupational area are included. Within the outline are three levels of items: core, advancing, and futuring. Core items identify the knowledge, skills, and attitudes essential for entry-level employment. These items are required to be taught and will be the basis for questions on the state vocational competency tests. Advancing items identify the knowledge, skills, and attitudes needed to advance in the occupation; futuring items identify the knowledge, skills, and attitudes needed to enter and remain in a given occupation 3 to 4 years from now. Titles of the seven units are as follows: general safety precautions; turf and landscape operations; equipment maintenance; construction skills; marketing and sales; business management; and employability skills. (YLB)

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ED 345 080

# O C A P

## OHIO'S COMPETENCY ANALYSIS PROFILE

# TURF AND LANDSCAPE WORKER

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Joe Duncan, *Ever-Green Lawn Care Inc.*, Troy, Ohio

Treva L. Jenkins, *Scarff's Nursery Inc./Landscape Division*, New Carlisle, Ohio

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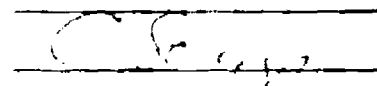
Guy Lanier, *Natorp's Landscape Organization*, Cincinnati, Ohio

Edward W. Odorizzi, *The Country Club at Muirfield Village*, Dublin, Ohio

Darren Rowland, *Rice's Nursery*, Canton, Ohio

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Division of Vocational and Career Education  
Ohio Department of Education

Vocational Instructional Materials Laboratory  
Center on Education and Training for Employment



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# What is OCAP?

"A comprehensive and verified employer competency list will be developed and kept current for each program." This is the second objective of Imperative 3 of the *Action Plan for Accelerating the Modernization of Vocational Education: Ohio's Future at Work*. Ohio's Competency Analysis Profile (OCAP) lists are the Division of Vocational and Career Education's response to that objective. OCAP lists evolve from a modified DACUM process involving business, industry, labor, and community agency representatives from throughout Ohio. The OCAP process is directed by the Vocational Instructional Materials Laboratory at The Ohio State University's Center on Education and Training for Employment.

## How is OCAP used?

Each OCAP contains units (with and without subunits), competencies, and competency builders that identify the occupational, academic\*, and employability skills needed to enter a given occupation or occupational area. Within that outline there are three levels of items: core, advancing, and futuring. Core items identify the knowledge, skills, and attitudes essential for entry-level employment. These items are required to be taught and will be the basis for questions on the state vocational competency tests (scheduled to begin in school year 1993-94). Advancing items (marked with one asterisk) identify the knowledge, skills, and attitudes needed to advance in a given occupation. Futuring items (marked with two asterisks) identify the knowledge, skills, and attitudes needed to enter and remain in a given occupation three to four years from now.

School districts may add as many units, subunits, competencies, and/or competency builders as desired to reflect local employment needs, trends, and specialties. Local advisory committees should be actively involved in the identification and verification of additional items. Using OCAP lists, instructors will be able to formulate their vocational courses of study and monitor competency gains via the new criterion-referenced competency testing program that will be directly tied to the competencies identified on the OCAP lists.

\*Academic competencies have not been identified for all OCAPs. At a later date math, communication, and science competencies will be released.

The **Employability Skills** portion of this list was verified by the following employer panel:

Gary J. Corrigan, *Dana Corporation*, Ottawa Lake, Michigan  
David Crooks, *Bowling Green State University Union Food Service*, Bowling Green, Ohio  
Pat Doerman, *Farrow's Harley-Davidson*, Columbus, Ohio  
William Gockenbach, *Kaiser Aluminum*, Heath, Ohio  
Patsy Hathaway, *CBS Personnel Services, Inc.*, Dayton, Ohio  
Marlyn Harman, *Marlyn Harman & Associates*, Cleveland, Ohio  
Thomas R. Hyldahl, *Toledo Edison*, Toledo, Ohio  
Carol C. James, *Ohio Contractors Association*, Columbus, Ohio  
James Mack, *Chrysler Jeep Assembly*, Toledo, Ohio  
Rocky McCoy, *Ironton-Lawrence Co. Community Action Organization*, Ironton, Ohio  
James Needs, *Independent Crop Producer*, Upper Sandusky, Ohio  
Ronald Simmons, *Former GM Executive*, Warren Ohio

# Ohio Competency Analysis Profile Turf and Landscape Worker

## Unit 1: General Safety Precautions

### Competency 1.0.1: Maintain safe work environment

#### *Competency Builders:*

- 1.0.1.1 Read, comprehend, and follow safety information
- 1.0.1.2 Organize and maintain clean and safe work area
- 1.0.1.3 Identify hazardous materials and location of material safety data sheets (MSDSs)
- 1.0.1.4 Comply with shop and equipment safety rules
- 1.0.1.5 Complete detailed accident report
- 1.0.1.6 Recognize environmental and safety issues pertaining to the industry, health administration, Environmental Protection Agency (EPA), Food and Drug Administration (FDA), Occupational Safety and Health Administration (OSHA), and state and federal regulations
- 1.0.1.7 Identify and report safety hazards
- 1.0.1.8 Install and maintain safety devices
- 1.0.1.9 Comply with general-use and restricted-use product regulations
- 1.0.1.10 Correct safety hazards\*
- 1.0.1.11 Monitor regulation updates\*
- 1.0.1.12 Reuse and recycle water\*\*
- 1.0.1.13 Follow government regulations and restrictions\*\*

### Competency 1.0.2: Demonstrate safe work habits

#### *Competency Builders:*

- 1.0.2.1 Read and follow label information
- 1.0.2.2 Wear protective clothing and equipment
- 1.0.2.3 Use safe lifting and carrying methods
- 1.0.2.4 Interpret information on signs
- 1.0.2.5 Check and report working condition of respirator
- 1.0.2.6 Observe safety precautions when applying chemicals and fertilizer
- 1.0.2.7 Observe safety precautions when storing chemicals and fertilizer
- 1.0.2.8 Follow personal cleanup procedures after handling chemicals and fertilizer
- 1.0.2.9 Dispose of chemicals and chemical containers according to manual specifications and/or government regulations
- 1.0.2.10 Reuse and recycle wastewater safely
- 1.0.2.11 Observe safety precautions when handling chemical or fertilizer spill

\* Advancing  
\*\* Futuring

## **Turf and Landscape Worker--3/92**

### **Competency 1.0.3: Operate and maintain equipment**

#### *Competency Builders:*

- 1.0.3.1 Follow safety rules for equipment operation and maintenance
- 1.0.3.2 Observe and comply with safety zones around equipment
- 1.0.3.3 Operate equipment defensively
- 1.0.3.4 Interpret safety symbols
- 1.0.3.5 Maintain and use slow-moving-vehicle signs when operating vehicles on road
- 1.0.3.6 Keep riders off mobile equipment
- 1.0.3.7 Maintain safety shields on all equipment
- 1.0.3.8 Shut down and lock out/tag out power equipment before servicing
- 1.0.3.9 Identify and report potential equipment safety hazards
- 1.0.3.10 Follow manufacturer's service recommendations
- 1.0.3.11 Maintain valid driver's license

## **Unit 2: Turf and Landscape Operations**

### **Competency 2.0.1: Demonstrate understanding of turf and landscape industry**

#### *Competency Builders:*

- 2.0.1.1 Identify fields of endeavor
- 2.0.1.2 Recognize economic importance of industry
- 2.0.1.3 Recognize environmental importance of industry
- 2.0.1.4 Identify employment opportunities
- 2.0.1.5 Recognize regulatory aspects of industry
- 2.0.1.6 Identify continuing education opportunities
- 2.0.1.7 Identify professional organizations and trade journals
- 2.0.1.8 Identify state licensing requirements
- 2.0.1.9 Identify physical nature of work
- 2.0.1.10 Obtain pesticide license\*\*

### **Competency 2.0.2: Examine plant physiology and growth**

#### *Competency Builders:*

- 2.0.2.1 Identify woody and herbaceous plants
- 2.0.2.2 Identify plant parts
- 2.0.2.3 Identify photosynthesis process
- 2.0.2.4 Identify functions of roots, stems, and leaves
- 2.0.2.5 Identify requirements for healthy plant growth
- 2.0.2.6 Identify taproot and fibrous root systems
- 2.0.2.7 Identify differences between evergreen and deciduous plants
- 2.0.2.8 Conserve water\*\*

**Competency 2.0.3: Identify and classify plants**

*Competency Builders:*

- 2.0.3.1 Classify turf and landscape plants as monocots or dicots
- 2.0.3.2 Classify turf and landscape plants as annuals, biennials, or perennials
- 2.0.3.3 Identify outdoor bulbs
- 2.0.3.4 Identify annual flowers
- 2.0.3.5 Identify perennial flowers
- 2.0.3.6 Identify shade trees
- 2.0.3.7 Identify ornamental trees
- 2.0.3.8 Identify shrubs
- 2.0.3.9 Identify ground covers
- 2.0.3.10 Identify conifers
- 2.0.3.11 Identify turf and landscape plants according to scientific name\*
- 2.0.3.12 Identify environmental plant preferences\*
- 2.0.3.13 Classify turf and landscape plants according to growth habit\*
- 2.0.3.14 Identify wildflowers\*
- 2.0.3.15 Identify herbs\*
- 2.0.3.16 Identify fruit trees\*
- 2.0.3.17 Identify ferns\*
- 2.0.3.18 Identify turfgrasses\*
- 2.0.3.19 Identify vines\*
- 2.0.3.20 Identify vegetables\*
- 2.0.3.21 Recognize improved varieties\*\*

**Competency 2.0.4: Plan landscape designs**

*Competency Builders:*

- 2.0.4.1 Analyze site conditions
- 2.0.4.2 Identify and use drafting equipment
- 2.0.4.3 Use color to enhance finished plans
- 2.0.4.4 Design public area planting\*
- 2.0.4.5 Design drainage system\*
- 2.0.4.6 Design outdoor privacy area\*
- 2.0.4.7 Design theme gardens\*
- 2.0.4.8 Design service area\*
- 2.0.4.9 Design residential planting\*
- 2.0.4.10 Design commercial planting\*
- 2.0.4.11 Design golf courses\*
- 2.0.4.12 Design athletic fields\*
- 2.0.4.13 Create spatial concepts\*
- 2.0.4.14 Coordinate plant requirements to environmental conditions\*
- 2.0.4.15 Select plant and seed varieties\*
- 2.0.4.16 Draw landscape symbols\*
- 2.0.4.17 Draw plan to scale\*
- 2.0.4.18 Evaluate landscape model\*
- 2.0.4.19 Design xeroscaping\*\*
- 2.0.4.20 Design alternative public areas\*\*
- 2.0.4.21 Design edible landscapes\*\*
- 2.0.4.22 Use AutoCAD\*\*

\* Advancing  
\*\* Futuring

## **Turf and Landscape Worker--3/92**

### **Competency 2.0.5: Test soil and plant tissues**

#### *Competency Builders:*

- 2.0.5.1 Take soil and plant tissue samples
- 2.0.5.2 Prepare soil and plant tissues to be tested
- 2.0.5.3 Read results of soil and plant tissue tests
- 2.0.5.4 Interpret results of soil and plant tissue tests\*

### **Competency 2.0.6: Prepare for landscape and turf installation**

#### *Competency Builders:*

- 2.0.6.1 Follow general safety precautions
- 2.0.6.2 Determine planting rates
- 2.0.6.3 Determine planting depth
- 2.0.6.4 Determine planting time
- 2.0.6.5 Interpret seed and bulb tag information
- 2.0.6.6 Read landscape plan
- 2.0.6.7 Convert scale to site
- 2.0.6.8 Determine material quantities
- 2.0.6.9 Identify underground utilities
- 2.0.6.10 Plan planting schedules\*
- 2.0.6.11 Plan soil erosion controls\*

### **Competency 2.0.7: Prepare landscape and turfgrass area**

#### *Competency Builders:*

- 2.0.7.1 Follow general safety precautions
- 2.0.7.2 Define areas
- 2.0.7.3 Establish rough grade
- 2.0.7.4 Create contour
- 2.0.7.5 Incorporate soil amendments
- 2.0.7.6 Establish finish grade

### **Competency 2.0.8: Receive and deliver landscape and turfgrass products**

#### *Competency Builders:*

- 2.0.8.1 Follow general safety precautions
- 2.0.8.2 Unload products
- 2.0.8.3 Unpack products
- 2.0.8.4 Load products
- 2.0.8.5 Secure load
- 2.0.8.6 Monitor quality control
- 2.0.8.7 Maintain shipping and receiving records\*

**Competency 2.0.9: Establish turf and landscape**

*Competency Builders:*

- 2.0.9.1 Follow general safety precautions
- 2.0.9.2 Plant seeds
- 2.0.9.3 Plant bulbs
- 2.0.9.4 Plant shrubs
- 2.0.9.5 Plant ground covers
- 2.0.9.6 Plant annual and perennial plants
- 2.0.9.7 Plant trees
- 2.0.9.8 Wrap, stake, and guy trees
- 2.0.9.9 Water-in plant material
- 2.0.9.10 Lay sod
- 2.0.9.11 Apply mulch
- 2.0.9.12 Plant drought-resistant and disease-resistant cultivars\*\*
- 2.0.9.13 Plant endophyte-enhanced turfgrass\*\*

**Competency 2.0.10: Fertilize plants**

*Competency Builders:*

- 2.0.10.1 Follow general safety precautions
- 2.0.10.2 Interpret manufacturer's fertilization-rate charts
- 2.0.10.3 Interpret fertilizer labels
- 2.0.10.4 Identify application methods
- 2.0.10.5 Calibrate fertilizer application equipment
- 2.0.10.6 Mix fertilizer solutions
- 2.0.10.7 Apply liquid fertilizer
- 2.0.10.8 Apply dry fertilizer
- 2.0.10.9 Determine application pattern
- 2.0.10.10 Determine nutrient requirements\*
- 2.0.10.11 Identify symptoms of nutrient deficiency\*
- 2.0.10.12 Determine kind of fertilizer and soil amendments to apply\*
- 2.0.10.13 Determine amount of fertilizer and soil amendments to apply\*
- 2.0.10.14 Select application method\*
- 2.0.10.15 Use fertilizer injectors\*
- 2.0.10.16 Use organic fertilizers\*\*
- 2.0.10.17 Use polymers\*\*

**Competency 2.0.11: Maintain landscape plants**

*Competency Builders:*

- 2.0.11.1 Follow general safety precautions
- 2.0.11.2 Pinch plants
- 2.0.11.3 Cultivate plants
- 2.0.11.4 Water plants
- 2.0.11.5 Apply mulches
- 2.0.11.6 Prune trees
- 2.0.11.7 Prune shrubs
- 2.0.11.8 Transplant bulbs, corms, and tubers
- 2.0.11.9 Treat tree wounds
- 2.0.11.10 Remove fallen leaves

(continued)

\* Advancing  
\*\* Futuring



## **Turf and Landscape Worker--3/92**

(continued)

- 2.0.11.11 Remove old flowers
- 2.0.11.12 Apply growth-regulating compounds\*
- 2.0.11.13 Maintain plants on arbors and trellises\*
- 2.0.11.14 Compost plant debris\*\*
- 2.0.11.15 Use growth regulators\*\*

### **Competency 2.0.12: Maintain turfgrasses**

*Competency Builders:*

- 2.0.12.1 Follow general safety precautions
- 2.0.12.2 Apply top dressing to turfgrass areas
- 2.0.12.3 Verticut turf
- 2.0.12.4 Overseed turf
- 2.0.12.5 Water turf
- 2.0.12.6 Aerate turf
- 2.0.12.7 Renovate turf
- 2.0.12.8 Fill in holes and depressions in turf
- 2.0.12.9 Relocate cups and tee markers
- 2.0.12.10 Slice seed turf
- 2.0.12.11 Mow turf
- 2.0.12.12 Grasscycle turf
- 2.0.12.13 Maintain nutrient levels
- 2.0.12.14 Trim turf
- 2.0.12.15 Edge turf
- 2.0.12.16 Apply growth-regulating compounds\*
- 2.0.12.17 Use growth regulators\*\*
- 2.0.12.18 Compost clippings\*\*

### **Competency 2.0.13: Plan integrated pest management (IPM) control program**

*Competency Builders:*

- 2.0.13.1 Follow general safety precautions
- 2.0.13.2 Identify insects, diseases, and weeds
- 2.0.13.3 Recognize pest damage
- 2.0.13.4 Calculate area to be covered
- 2.0.13.5 Complete certification requirements for prescribed chemical application
- 2.0.13.6 Evaluate chemical/cultural/biological control options
- 2.0.13.7 Interpret chemical labels and compatibility charts
- 2.0.13.8 Identify appropriate control methods
- 2.0.13.9 Identify disease-resistant and insect-resistant species\*
- 2.0.13.10 Estimate pest population numbers\*
- 2.0.13.11 Assess degree of damage\*
- 2.0.13.12 Determine when controls are needed\*
- 2.0.13.13 Map chemical application\*
- 2.0.13.14 Use biocontrols\*\*

**Competency 2.0.14: Apply chemical pest-control treatments**

*Competency Builders:*

- 2.0.14.1 Follow general safety precautions
- 2.0.14.2 Calibrate application equipment
- 2.0.14.3 Mix chemicals and load application equipment
- 2.0.14.4 Use application equipment
- 2.0.14.5 Follow proper cleaning procedures
- 2.0.14.6 Maintain application record
- 2.0.14.7 Identify pest baits
- 2.0.14.8 Determine application pattern
- 2.0.14.9 Recognize chemical injury to plant\*

**Unit 3: Equipment Maintenance**

**Competency 3.0.1: Maintain equipment**

*Competency Builders:*

- 3.0.1.1 Follow general safety precautions
- 3.0.1.2 Calibrate equipment
- 3.0.1.3 Adjust belts
- 3.0.1.4 Adjust chains
- 3.0.1.5 Inspect assembled equipment for operating defects
- 3.0.1.6 Clean and lubricate parts
- 3.0.1.7 Sharpen equipment
- 3.0.1.8 Maintain service records

**Competency 3.0.2: Service engine cooling systems**

*Competency Builders:*

- 3.0.2.1 Follow general safety precautions
- 3.0.2.2 Test coolant mixture
- 3.0.2.3 Adjust or replace fan belt
- 3.0.2.4 Replace hoses
- 3.0.2.5 Inspect for leaks
- 3.0.2.6 Add coolant
- 3.0.2.7 Flush cooling system
- 3.0.2.8 Troubleshoot problems
- 3.0.2.9 Clean up and dispose of coolant and containers

**Competency 3.0.3: Service engine lubrication systems**

*Competency Builders:*

- 3.0.3.1 Follow general safety precautions
- 3.0.3.2 Check oil level
- 3.0.3.3 Select oil
- 3.0.3.4 Change oil and oil filters
- 3.0.3.5 Maintain and replace grease fittings
- 3.0.3.6 Grease or oil joints
- 3.0.3.7 Clean up and dispose of oil and containers

\* Advancing

\*\* Futuring

## **Turf and Landscape Worker--3/92**

### **Competency 3.0.4: Service small-engine fuel and air systems**

#### *Competency Builders:*

- 3.0.4.1 Follow general safety precautions
- 3.0.4.2 Service air cleaner
- 3.0.4.3 Bleed diesel fuel system
- 3.0.4.4 Mix gas and oil for two-cycle engine
- 3.0.4.5 Service and clean crankcase ventilation components
- 3.0.4.6 Clean and adjust carburetor
- 3.0.4.7 Service fuel filter assembly
- 3.0.4.8 Replace exhaust system components
- 3.0.4.9 Inspect and clean engine valves
- 3.0.4.10 Identify proper fuel and tank
- 3.0.4.11 Add fuel
- 3.0.4.12 Troubleshoot problems
- 3.0.4.13 Adjust engine valves\*

### **Competency 3.0.5: Maintain and service small-engine electrical systems**

#### *Competency Builders:*

- 3.0.5.1 Follow general safety precautions
- 3.0.5.2 Replace spark plugs and wires
- 3.0.5.3 Clean spark plugs
- 3.0.5.4 Adjust spark plug gap
- 3.0.5.5 Check specific gravity of battery
- 3.0.5.6 Install battery
- 3.0.5.7 Clean and treat battery terminals, cables, and battery box
- 3.0.5.8 Charge battery
- 3.0.5.9 Replace fuses and light bulbs
- 3.0.5.10 Troubleshoot problems
- 3.0.5.11 Inspect and replace distributor cap and rotor\*
- 3.0.5.12 Inspect and adjust/change breaker points\*
- 3.0.5.13 Troubleshoot problems with computer systems\*\*

### **Competency 3.0.6: Service wheels and tires**

#### *Competency Builders:*

- 3.0.6.1 Follow general safety precautions
- 3.0.6.2 Check tire pressure
- 3.0.6.3 Inflate tires
- 3.0.6.4 Check and tighten lug nuts
- 3.0.6.5 Remove and replace flat tires
- 3.0.6.6 Troubleshoot problems
- 3.0.6.7 Rotate tires
- 3.0.6.8 Check valve stems
- 3.0.6.9 Patch tubes

\* Advancing

\*\* Futuring

**Competency 3.0.7: Service hydraulic systems**

*Competency Builders:*

- 3.0.7.1 Follow general safety precautions
- 3.0.7.2 Inspect system for oil leaks
- 3.0.7.3 Clean couplings
- 3.0.7.4 Inspect hoses
- 3.0.7.5 Identify proper reservoir
- 3.0.7.6 Check and add oil
- 3.0.7.7 Select oil
- 3.0.7.8 Replace oil filter
- 3.0.7.9 Clean up and dispose of hydraulic fluids
- 3.0.7.10 Troubleshoot problems
- 3.0.7.11 Bleed air from system\*
- 3.0.7.12 Replace hoses\*

**Competency 3.0.8: Perform predeparture functions**

*Competency Builders:*

- 3.0.8.1 Follow general safety precautions
- 3.0.8.2 Connect front-end-operated equipment
- 3.0.8.3 Connect 3-point-hitch equipment
- 3.0.8.4 Attach and detach power takeoff equipment
- 3.0.8.5 Hitch towed equipment
- 3.0.8.6 Connect hydraulic lines
- 3.0.8.7 Connect electrical hookups
- 3.0.8.8 Connect safety chains
- 3.0.8.9 Refuel power units
- 3.0.8.10 Inspect working condition of lights
- 3.0.8.11 Check fluid levels
- 3.0.8.12 Secure all equipment and materials

**Competency 3.0.9: Operate equipment and vehicles**

*Competency Builders:*

- 3.0.9.1 Follow general safety precautions
- 3.0.9.2 Adjust throttle for operating conditions
- 3.0.9.3 Interpret equipment gauges
- 3.0.9.4 Start and shut down engine
- 3.0.9.5 Use hand operating signals
- 3.0.9.6 Operate manual transmission
- 3.0.9.7 Operate automatic transmission
- 3.0.9.8 Use brake systems
- 3.0.9.9 Adjust seating and steering
- 3.0.9.10 Preheat diesels
- 3.0.9.11 Secure vehicle when parked
- 3.0.9.12 Set out safety markers
- 3.0.9.13 Flag extended materials
- 3.0.9.14 Operate liftgates
- 3.0.9.15 Operate dump beds
- 3.0.9.16 Operate winch

(continued)

\* Advancing  
\*\* Futuring

## **Turf and Landscape Worker--3/92**

(continued)

- 3.0.9.17 Operate snowplow
- 3.0.9.18 Operate utility vehicles
- 3.0.9.19 Obtain commercial driver's license (CDL)\*\*

### **Competency 3.0.10: Operate power equipment**

*Competency Builders:*

- 3.0.10.1 Follow general safety precautions
- 3.0.10.2 Use spreader
- 3.0.10.3 Use seeder
- 3.0.10.4 Use rotary tiller
- 3.0.10.5 Use edger
- 3.0.10.6 Use blower
- 3.0.10.7 Use aerator
- 3.0.10.8 Use roller
- 3.0.10.9 Use mowing equipment
- 3.0.10.10 Use trimming equipment
- 3.0.10.11 Use lawn sweepers
- 3.0.10.12 Use sod cutter
- 3.0.10.13 Use chain saw
- 3.0.10.14 Use verticutter/turf groomers
- 3.0.10.15 Use tractor
- 3.0.10.16 Use spray equipment
- 3.0.10.17 Use power washer
- 3.0.10.18 Use straw blowers
- 3.0.10.19 Use hand-held augers
- 3.0.10.20 Use power tamps
- 3.0.10.21 Use skid loader\*
- 3.0.10.22 Use trencher\*
- 3.0.10.23 Use backhoe\*
- 3.0.10.24 Use hydroseeders/mulchers\*
- 3.0.10.25 Use chippers\*
- 3.0.10.26 Use tree spade\*
- 3.0.10.27 Use cutoff saws\*
- 3.0.10.28 Use landscape rake\*
- 3.0.10.29 Use hydraulic tools\*\*
- 3.0.10.30 Use sod cutter/layer\*\*

### **Competency 3.0.11: Clean and store equipment**

*Competency Builders:*

- 3.0.11.1 Follow general safety precautions
- 3.0.11.2 Remove debris from equipment
- 3.0.11.3 Use steam or high-pressure wash equipment
- 3.0.11.4 Prepare engines for storage
- 3.0.11.5 Lubricate equipment for storage
- 3.0.11.6 Drain pumping system

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**Competency 3.0.12: Use and maintain hand, power, and pneumatic tools**

*Competency Builders:*

- 3.0.12.1 Follow general safety precautions
- 3.0.12.2 Follow operation instructions
- 3.0.12.3 Identify tools
- 3.0.12.4 Select tools
- 3.0.12.5 Set up and adjust tools
- 3.0.12.6 Clean and lubricate tools
- 3.0.12.7 Recondition tools
- 3.0.12.8 Sharpen tools
- 3.0.12.9 Store tools

**Competency 3.0.13: Apply protective coatings**

*Competency Builders:*

- 3.0.13.1 Follow general safety precautions
- 3.0.13.2 Clean and sand surface
- 3.0.13.3 Apply masking tape
- 3.0.13.4 Thin paint
- 3.0.13.5 Mix and apply primer coat
- 3.0.13.6 Apply finish coat
- 3.0.13.7 Apply wood preservative
- 3.0.13.8 Use steam and high-pressure wash equipment
- 3.0.13.9 Determine type of coating\*
- 3.0.13.10 Use environmentally safe preservative\*\*

**Competency 3.0.14: Fabricate with metal**

*Competency Builders:*

- 3.0.14.1 Follow general safety precautions
- 3.0.14.2 Punch and drill metal
- 3.0.14.3 Cut metal
- 3.0.14.4 Select thread and size for tap or die
- 3.0.14.5 Thread hole or rod
- 3.0.14.6 Grind metal
- 3.0.14.7 Identify types of metal\*
- 3.0.14.8 Design plans\*
- 3.0.14.9 Prepare bill of materials\*
- 3.0.14.10 Test metal for type and hardness\*
- 3.0.14.11 Join metal\*
- 3.0.14.12 Bend sheet metal\*

\* Advancing  
\*\* Futuring

## **Turf and Landscape Worker--3/92**

### **Competency 3.0.15: Maintain and service spraying equipment**

#### *Competency Builders:*

- 3.0.15.1 Follow general safety precautions
- 3.0.15.2 Clean and inspect spray nozzles
- 3.0.15.3 Select spray nozzles
- 3.0.15.4 Calibrate equipment
- 3.0.15.5 Maintain pump spray equipment
- 3.0.15.6 Inspect hose and connections
- 3.0.15.7 Pressure-check hoses
- 3.0.15.8 Clean and inspect tanks
- 3.0.15.9 Repair and splice hoses
- 3.0.15.10 Troubleshoot problems
- 3.0.15.11 Reuse and recycle water\*\*
- 3.0.15.12 Use low-volume spraying\*\*

### **Competency 3.0.16: Maintain and service spreaders**

#### *Competency Builders:*

- 3.0.16.1 Follow general safety precautions
- 3.0.16.2 Oil and lubricate spreader
- 3.0.16.3 Clean up and properly dispose of spreader waste
- 3.0.16.4 Calibrate equipment
- 3.0.16.5 Adjust and clean blade propellor
- 3.0.16.6 Troubleshoot problems

### **Competency 3.0.17: Weld with gas\***

#### *Competency Builders:*

- 3.0.17.1 Follow general safety precautions\*
- 3.0.17.2 Set up and adjust gas welding equipment\*
- 3.0.17.3 Select rod\*
- 3.0.17.4 Select and apply flux\*
- 3.0.17.5 Cut metal\*
- 3.0.17.6 Weld steel in horizontal positions\*
- 3.0.17.7 Weld steel with filler rod\*
- 3.0.17.8 Braze metal\*
- 3.0.17.9 Clean and store equipment\*
- 3.0.17.10 Secure and store gas cylinders\*

### **Competency 3.0.18: Weld with electric arc and MIG\***

#### *Competency Builders:*

- 3.0.18.1 Follow general safety precautions\*
- 3.0.18.2 Select welding equipment and accessories\*
- 3.0.18.3 Select electrode sizes and types\*
- 3.0.18.4 Select settings\*
- 3.0.18.5 Prepare metal\*
- 3.0.18.6 Weld steel in nonhorizontal positions\*
- 3.0.18.7 Weld steel in horizontal positions\*

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- 3.0.18.8 Weld pipe\*
- 3.0.18.9 Cut metal\*
- 3.0.18.10 Clean and store equipment\*

## **Unit 4: Construction Skills**

### **Competency 4.0.1: Construct with concrete**

#### *Competency Builders:*

- 4.0.1.1 Follow general safety precautions
- 4.0.1.2 Select and use hand concrete tools
- 4.0.1.3 Excavate structure sites for concrete pouring
- 4.0.1.4 Install concrete reinforcement
- 4.0.1.5 Build and remove concrete forms
- 4.0.1.6 Mix and pour concrete
- 4.0.1.7 Cure concrete
- 4.0.1.8 Use survey level\*
- 4.0.1.9 Select concrete materials and additives\*
- 4.0.1.10 Calculate volume of concrete to order or mix\*
- 4.0.1.11 Finish concrete surface\*
- 4.0.1.12 Lay block\*
- 4.0.1.13 Lay brick\*
- 4.0.1.14 Install concrete edging\*
- 4.0.1.15 Select and use power concrete tools\*

### **Competency 4.0.2: Construct with stone and pavers**

#### *Competency Builders:*

- 4.0.2.1 Follow general safety precautions
- 4.0.2.2 Excavate for foundation
- 4.0.2.3 Apply and compact aggregates
- 4.0.2.4 Grade sand using screed
- 4.0.2.5 Install edging
- 4.0.2.6 Lay pavers
- 4.0.2.7 Lay gravel
- 4.0.2.8 Set landscape stones
- 4.0.2.9 Lay stone\*
- 4.0.2.10 Construct wall\*
- 4.0.2.11 Select stone\*
- 4.0.2.12 Face stone\*



## **Turf and Landscape Worker--3/92**

### **Competency 4.0.3: Construct with wood**

#### *Competency Builders:*

- 4.0.3.1 Follow general safety precautions
- 4.0.3.2 Cut lumber to dimension
- 4.0.3.3 Cut and fit joints
- 4.0.3.4 Select and use metal fasteners
- 4.0.3.5 Cut and set timber and poles
- 4.0.3.6 Install and repair bracing
- 4.0.3.7 Install and repair siding
- 4.0.3.8 Select types of wood\*
- 4.0.3.9 Install and repair doors\*
- 4.0.3.10 Construct wood structures\*
- 4.0.3.11 Use recycled plastics\*\*

### **Competency 4.0.4: Install and maintain electrical systems**

#### *Competency Builders:*

- 4.0.4.1 Follow general safety precautions
- 4.0.4.2 Repair extension cords
- 4.0.4.3 Install and maintain low-voltage lighting fixtures
- 4.0.4.4 Replace or reset circuit breakers and fuses\*
- 4.0.4.5 Wire and install outlets and switches\*
- 4.0.4.6 Install electric motors\*
- 4.0.4.7 Repair and splice outdoor wiring\*
- 4.0.4.8 Lubricate motors\*
- 4.0.4.9 Troubleshoot problems\*
- 4.0.4.10 Install computerized components\*\*

### **Competency 4.0.5: Install and maintain water delivery systems**

#### *Competency Builders:*

- 4.0.5.1 Follow general safety precautions
- 4.0.5.2 Open trench line
- 4.0.5.3 Locate existing underground waterlines
- 4.0.5.4 Cut and fit pipe or tubing
- 4.0.5.5 Tap into existing waterlines
- 4.0.5.6 Install pipe and pipe fittings
- 4.0.5.7 Install and repair valves and faucets
- 4.0.5.8 Install filters
- 4.0.5.9 Test and adjust sprinkler spray patterns
- 4.0.5.10 Repair access wall
- 4.0.5.11 Backfill trenches
- 4.0.5.12 Replace gaskets
- 4.0.5.13 Unclog pipes
- 4.0.5.14 Troubleshoot problems
- 4.0.5.15 Install flow-control devices\*
- 4.0.5.16 Bore and sleeve pipe\*

**Competency 4.0.6: Operate and maintain sprinkler systems**

*Competency Builders:*

- 4.0.6.1 Follow general safety precautions
- 4.0.6.2 Adjust sprinkler patterns
- 4.0.6.3 Determine sprinkler precipitation rate
- 4.0.6.4 Troubleshoot problems
- 4.0.6.5 Program automatic timers\*
- 4.0.6.6 Winterize systems\*

**Competency 4.0.7: Install and maintain fencing**

*Competency Builders:*

- 4.0.7.1 Follow general safety precautions
- 4.0.7.2 Lay out fence
- 4.0.7.3 Install posts and braces
- 4.0.7.4 Install fasteners
- 4.0.7.5 Identify options in fencing systems\*
- 4.0.7.6 Determine amount of fence required\*
- 4.0.7.7 Select fencing materials\*
- 4.0.7.8 Select posts and braces\*
- 4.0.7.9 Select fasteners\*
- 4.0.7.10 Install gates\*
- 4.0.7.11 Use recycled plastics\*\*

**Competency 4.0.8: Apply protective coatings**

*Competency Builders:*

- 4.0.8.1 Follow general safety precautions
- 4.0.8.2 Clean and sand surface
- 4.0.8.3 Use steam and high-pressure wash equipment
- 4.0.8.4 Apply masking tape
- 4.0.8.5 Thin paint
- 4.0.8.6 Mix and apply primer coat
- 4.0.8.7 Apply finish coat
- 4.0.8.8 Apply wood preservative
- 4.0.8.9 Determine type of coating\*
- 4.0.8.10 Use less toxic preservative\*\*

**Competency 4.0.9: Plan electrical installations\***

*Competency Builders:*

- 4.0.9.1 Follow general safety precautions\*
- 4.0.9.2 Follow electrical codes\*
- 4.0.9.3 Identify electrical needs\*
- 4.0.9.4 Plan distribution system\*
- 4.0.9.5 Plan wiring layouts\*
- 4.0.9.6 Select wire and electrical supplies\*
- 4.0.9.7 Identify alternative electrical sources\*

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## **Turf and Landscape Worker--3/92**

### **Competency 4.0.10: Design water delivery system\***

#### *Competency Builders:*

- 4.0.10.1 Determine required quantity and quality of water\*
- 4.0.10.2 Select water source\*
- 4.0.10.3 Plan distribution system\*
- 4.0.10.4 Select components for irrigation system\*
- 4.0.10.5 Calculate water flow\*
- 4.0.10.6 Use drafting equipment\*
- 4.0.10.7 Compare sprinkler, bubbler, and drip irrigation systems\*
- 4.0.10.8 Read and interpret performance charts\*
- 4.0.10.9 Design subsurface systems\*\*
- 4.0.10.10 Conserve water\*\*

## **Unit 5: Marketing and Sales**

### **Competency 5.0.1: Enhance company image**

#### *Competency Builders:*

- 5.0.1.1 Exhibit good personal hygiene
- 5.0.1.2 Perform quality work
- 5.0.1.3 Follow instructions
- 5.0.1.4 Keep equipment clean
- 5.0.1.5 Follow dress code
- 5.0.1.6 Handle customer complaints
- 5.0.1.7 Communicate positively with customers
- 5.0.1.8 Read company manual
- 5.0.1.9 Maintain continuity and uniformity of company logo
- 5.0.1.10 Develop customer awareness programs\*\*

### **Competency 5.0.2: Demonstrate presale skills**

#### *Competency Builders:*

- 5.0.2.1 Maintain product and service knowledge
- 5.0.2.2 Differentiate between product features and product benefits
- 5.0.2.3 Examine types of selling techniques
- 5.0.2.4 Identify types of customers
- 5.0.2.5 Recognize customer buying motives
- 5.0.2.6 Recognize customer buying signals
- 5.0.2.7 Maintain prospective customer relationship\*

### **Competency 5.0.3: Prepare estimate**

#### *Competency Builders:*

- 5.0.3.1 Calculate square footage and cubic yards
- 5.0.3.2 Use price list
- 5.0.3.3 Estimate total amount of material needed\*
- 5.0.3.4 Estimate labor requirements\*
- 5.0.3.5 Estimate fixed costs\*
- 5.0.3.6 Estimate necessary profit margin\*

\* Advancing  
\*\* Futuring

**Competency 5.0.4: Conduct sale**

*Competency Builders:*

- 5.0.4.1 Greet customers
- 5.0.4.2 Use appropriate questioning technique
- 5.0.4.3 Use appropriate selling technique
- 5.0.4.4 Determine customer needs
- 5.0.4.5 Describe services
- 5.0.4.6 Explain extent of guarantee
- 5.0.4.7 Use support services
- 5.0.4.8 Close sale
- 5.0.4.9 Develop telephone skills
- 5.0.4.10 Compute taxes
- 5.0.4.11 Record sales information
- 5.0.4.12 Use product demonstrations, exhibits, and displays
- 5.0.4.13 Address customer complaints
- 5.0.4.14 Overcome customer objections\*
- 5.0.4.15 Follow up purchases and sales\*
- 5.0.4.16 Resolve customer complaints\*

**Competency 5.0.5: Advertise products and services\***

*Competency Builders:*

- 5.0.5.1 Identify products and services to be presented\*
- 5.0.5.2 Identify opportunities for publicity\*
- 5.0.5.3 Compare types and costs of advertising media\*
- 5.0.5.4 Plan presentation\*
- 5.0.5.5 Prepare advertising materials\*
- 5.0.5.6 Prepare product demonstrations, exhibits, and displays\*
- 5.0.5.7 Select signs\*

**Competency 5.0.6: Market turf and landscaping services\***

*Competency Builders:*

- 5.0.6.1 Locate market information sources\*
- 5.0.6.2 Determine when to market\*
- 5.0.6.3 Identify target markets\*
- 5.0.6.4 Identify potential buyers\*
- 5.0.6.5 Identify distribution channels\*
- 5.0.6.6 Analyze competition\*
- 5.0.6.7 Develop marketing goals\*

**Competency 5.0.7: Use and maintain price lists and catalogs\***

*Competency Builders:*

- 5.0.7.1 Compare prices of similar products and services\*
- 5.0.7.2 Determine material and service availability\*
- 5.0.7.3 Keep product and service catalogs current\*

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### **Competency 5.0.8: Price merchandise\***

#### *Competency Builders:*

- 5.0.8.1 Estimate fixed and variable expenses\*
- 5.0.8.2 Calculate markup\*
- 5.0.8.3 Calculate break-even point\*
- 5.0.8.4 Compare pricing strategies\*
- 5.0.8.5 Identify psychological effects of pricing\*
- 5.0.8.6 Price merchandise\*
- 5.0.8.7 Prepare merchandise for inventory or display\*
- 5.0.8.8 Use computerized pricing systems\*\*

## **Unit 6: Business Management**

### **Competency 6.0.1: Perform general office duties**

#### *Competency Builders:*

- 6.0.1.1 Duplicate materials
- 6.0.1.2 File materials
- 6.0.1.3 Prepare correspondence
- 6.0.1.4 Prepare reports
- 6.0.1.5 Plan work schedules
- 6.0.1.6 Use telephone
- 6.0.1.7 Operate calculator
- 6.0.1.8 Use two-way radio
- 6.0.1.9 Operate computer
- 6.0.1.10 Interpret computer printouts
- 6.0.1.11 Maintain service records
- 6.0.1.12 Record invoice records
- 6.0.1.13 Secure business documents\*
- 6.0.1.14 Schedule appointments and meetings\*
- 6.0.1.15 Open and close business facility\*
- 6.0.1.16 Use FAX machine\*
- 6.0.1.17 Keep detailed records\*\*
- 6.0.1.18 Recycle paper\*\*

### **Competency 6.0.2: Control inventory**

#### *Competency Builders:*

- 6.0.2.1 Organize storage area
- 6.0.2.2 Conduct physical inventory of turf and landscape items, structures, and equipment
- 6.0.2.3 Determine quantity of bulk items
- 6.0.2.4 Maintain inventory records
- 6.0.2.5 Organize sales area\*

**Competency 6.0.3: Receive merchandise**

*Competency Builders:*

- 6.0.3.1 Follow general safety precautions
- 6.0.3.2 Verify order
- 6.0.3.3 Unpack merchandise
- 6.0.3.4 Interpret packing slips and invoices
- 6.0.3.5 Check merchandise for shipping discrepancies
- 6.0.3.6 Inspect merchandise for damage
- 6.0.3.7 Distribute merchandise to designated location

**Competency 6.0.4: Ship merchandise**

*Competency Builders:*

- 6.0.4.1 Follow general safety precautions
- 6.0.4.2 Follow government regulations
- 6.0.4.3 Record shipments
- 6.0.4.4 Load merchandise
- 6.0.4.5 Secure load
- 6.0.4.6 Prepare shipping packages
- 6.0.4.7 Prepare shipping documents\*
- 6.0.4.8 Arrange delivery\*
- 6.0.4.9 Determine delivery route\*
- 6.0.4.10 Process special orders\*
- 6.0.4.11 Process returns to vendors\*
- 6.0.4.12 Calculate shipping charges\*

**Competency 6.0.5: Conduct general banking procedures\***

*Competency Builders:*

- 6.0.5.1 Prepare funds for bank deposit\*
- 6.0.5.2 Make bank deposit\*
- 6.0.5.3 Write checks\*
- 6.0.5.4 Endorse checks\*
- 6.0.5.5 Balance bank statement\*
- 6.0.5.6 Use automated tellers\*\*

**Competency 6.0.6: Keep customer accounts\***

*Competency Builders:*

- 6.0.6.1 Set up customer file\*
- 6.0.6.2 Post receipts\*
- 6.0.6.3 Balance customer accounts\*
- 6.0.6.4 Prepare statements\*
- 6.0.6.5 Prepare invoices\*
- 6.0.6.6 Check customer credit references\*

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### **Competency 6.0.7: Minimize theft\***

#### *Competency Builders:*

- 6.0.7.1 Examine effect of theft on profit\*
- 6.0.7.2 Identify potential loss situations\*
- 6.0.7.3 Maintain organized work area\*
- 6.0.7.4 Interpret laws regarding theft\*
- 6.0.7.5 Detect counterfeit currency\*
- 6.0.7.6 Contact authorities\*
- 6.0.7.7 Complete proper paperwork\*

### **Competency 6.0.8: Manage business finances\***

#### *Competency Builders:*

- 6.0.8.1 Prepare budget\*
- 6.0.8.2 Calculate insurance needs\*
- 6.0.8.3 Identify sources of business capital\*
- 6.0.8.4 Interpret financial statements\*
- 6.0.8.5 Record accounts payable\*
- 6.0.8.6 Prepare cash flow statements\*
- 6.0.8.7 Calculate overhead costs\*

### **Competency 6.0.9: Order merchandise\***

#### *Competency Builders:*

- 6.0.9.1 Determine when to order\*
- 6.0.9.2 Use vendor discounts\*
- 6.0.9.3 Select vendors\*
- 6.0.9.4 Order replacement parts\*
- 6.0.9.5 Calculate shipping charges\*
- 6.0.9.6 Determine amount of storage needed\*
- 6.0.9.7 Determine amount to order\*

## **Unit 7: Employability Skills**

### **Subunit 7.1: Career Development**

#### **Competency 7.1.1: Investigate career options**

##### *Competency Builders:*

- 7.1.1.1 Determine interests and aptitudes
- 7.1.1.2 Identify career options
- 7.1.1.3 Research occupations matching interests and aptitudes
- 7.1.1.4 Select career(s) that best match(es) interests and aptitudes
- 7.1.1.5 Identify advantages and disadvantages of career options, including nontraditional careers
- 7.1.1.6 Assess differences in wages, annual incomes, and job opportunities based on geographic location
- 7.1.1.7 Develop a career plan

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**Competency 7.1.2: Analyze potential barriers to employment**

*Competency Builders:*

- 7.1.2.1 Identify common barriers to employment
- 7.1.2.2 Describe strategies to overcome employment barriers

**Unit 7: Employability Skills**

**Subunit 7.2: Decision Making and Problem Solving**

**Competency 7.2.1: Apply decision-making techniques in the workplace**

*Competency Builders:*

- 7.2.1.1 Identify the decision to be made
- 7.2.1.2 Compare alternatives
- 7.2.1.3 Determine consequences of each alternative
- 7.2.1.4 Make decisions based on values and goals
- 7.2.1.5 Evaluate the decision made

**Competency 7.2.2: Apply problem-solving techniques in the workplace**

*Competency Builders:*

- 7.2.2.1 Diagnose the problem and its causes
- 7.2.2.2 Identify alternatives and their consequences in relation to the problem
- 7.2.2.3 Examine multicultural and nonsexist dimensions of problem solving
- 7.2.2.4 Utilize resources to explore possible solutions to the problem
- 7.2.2.5 Compare and contrast the advantages and disadvantages of each solution
- 7.2.2.6 Determine appropriate action
- 7.2.2.7 Evaluate results

**Unit 7: Employability Skills**

**Subunit 7.3: Work Ethic**

**Competency 7.3.1: Evaluate the relationship of self-esteem to work ethic**

*Competency Builders:*

- 7.3.1.1 Identify special characteristics and abilities in self and others
- 7.3.1.2 Identify internal and external factors that affect self-esteem



## **Turf and Landscape Worker--3/92**

### **Competency 7.3.2: Analyze the relationship of personal values and goals to work ethic both in and out of the workplace**

#### *Competency Builders:*

- 7.3.2.1 Distinguish between values and goals
- 7.3.2.2 Determine the importance of values and goals
- 7.3.2.3 Evaluate how values affect goals
- 7.3.2.4 Identify short-term and long-term goals
- 7.3.2.5 Prioritize personal goals
- 7.3.2.6 Describe how personal values are reflected in work ethic
- 7.3.2.7 Describe how interactions in the workplace affect personal work ethic
- 7.3.2.8 Examine how life changes affect personal work ethic

### **Competency 7.3.3: Demonstrate work ethic**

#### *Competency Builders:*

- 7.3.3.1 Examine factors that influence work ethic
- 7.3.3.2 Exhibit characteristics that reflect an appropriate work ethic

## **Unit 7: Employability Skills**

### **Subunit 7.4: Job-Seeking Skills**

#### **Competency 7.4.1: Prepare for employment**

##### *Competency Builders:*

- 7.4.1.1 Identify traditional and nontraditional employment sources
- 7.4.1.2 Utilize employment sources
- 7.4.1.3 Research job opportunities, including nontraditional careers
- 7.4.1.4 Interpret equal employment opportunity laws
- 7.4.1.5 Explain the critical importance of personal appearance, hygiene, and demeanor throughout the employment process
- 7.4.1.6 Prepare for generic employment tests and those specific to an occupation/organization

#### **Competency 7.4.2: Design a résumé**

##### *Competency Builders:*

- 7.4.2.1 Identify personal strengths and weaknesses
- 7.4.2.2 List skills and/or abilities, career objective(s), accomplishments/achievements, educational background, and work experience
- 7.4.2.3 Demonstrate legible written communication skills using correct grammar, spelling, and concise wording
- 7.4.2.4 Complete résumé using various formats
- 7.4.2.5 Secure references

**Competency 7.4.3: Complete and process job application forms**

*Competency Builders:*

- 7.4.3.1 Explain the importance of an application form
- 7.4.3.2 Identify ways to obtain job application forms
- 7.4.3.3 Describe methods for handling illegal questions on job application forms
- 7.4.3.4 Demonstrate legible written communication skills using correct grammar, spelling, and concise wording
- 7.4.3.5 Return application to proper person, request interview, and follow up

**Competency 7.4.4: Demonstrate interviewing skills**

*Competency Builders:*

- 7.4.4.1 Investigate interview environment and procedures
- 7.4.4.2 Explain the critical importance of personal appearance, hygiene, and demeanor
- 7.4.4.3 Demonstrate question and answer techniques
- 7.4.4.4 Demonstrate methods for handling difficult and/or illegal interview questions

**Competency 7.4.5: Secure employment**

*Competency Builders:*

- 7.4.5.1 Identify present and future employment opportunities within an occupation/organization
- 7.4.5.2 Research the organization/company
- 7.4.5.3 Use follow-up techniques to enhance employment potential
- 7.4.5.4 Compare and evaluate job offers

**Unit 7: Employability Skills**

**Subunit 7.5: Job Retention Skills**

**Competency 7.5.1: Analyze the organizational structure of the workplace**

*Competency Builders:*

- 7.5.1.1 Identify and evaluate employer expectations regarding job performance, work habits, attitudes, personal appearance, and hygiene
- 7.5.1.2 Be aware of and obey all company policies and procedures
- 7.5.1.3 Examine the role/relationship between employee and employer
- 7.5.1.4 Recognize opportunities for advancement and reasons for termination

**Competency 7.5.2: Maintain positive relations with others**

*Competency Builders:*

- 7.5.2.1 Exhibit appropriate work habits and attitude
- 7.5.2.2 Identify behaviors to establish successful working relationships
- 7.5.2.3 Cooperate and compromise through teamwork and group participation
- 7.5.2.4 Identify alternatives for dealing with harassment, bias, and discrimination based on race, color, national origin, sex, religion, handicap, or age

## **Unit 7: Employability Skills**

### **Subunit 7.6: Job Advancement**

#### **Competency 7.6.1: Analyze opportunities for personal and career growth**

##### *Competency Builders:*

- 7.6.1.1 Determine opportunities within an occupation/organization
- 7.6.1.2 Compare and contrast other opportunities
- 7.6.1.3 List benefits of job advancement
- 7.6.1.4 Evaluate factors involved when assuming a new position within or outside an occupation/organization

#### **Competency 7.6.2: Exhibit characteristics needed for advancement**

##### *Competency Builders:*

- 7.6.2.1 Display a positive attitude
- 7.6.2.2 Demonstrate knowledge of a position
- 7.6.2.3 Perform quality work
- 7.6.2.4 Adapt to changing situations and technology
- 7.6.2.5 Demonstrate capability for different positions
- 7.6.2.6 Participate in continuing education/training programs
- 7.6.2.7 Respect, accept, and work with ALL individuals in the workplace

## **Unit 7: Employability Skills**

### **Subunit 7.7: Technology in the Workplace**

#### **Competency 7.7.1: Assess the impact of technology in the workplace**

##### *Competency Builders:*

- 7.7.1.1 Cite how past business/industry practices have influenced present business/industry processes
- 7.7.1.2 Investigate the use of technology in the workplace
- 7.7.1.3 Analyze how present skills can be applied to learning new technologies

#### **Competency 7.7.2: Use a variety of technological applications**

##### *Competency Builders:*

- 7.7.2.1 Explore basic mathematical, scientific, computer, and technological principles
- 7.7.2.2 Use technology to accomplish assigned tasks
- 7.7.2.3 Create solutions to problems using technical means

## **Unit 7: Employability Skills**

### **Subunit 7.8: Lifelong Learning**

#### **Competency 7.8.1: Apply lifelong learning to individual situations**

##### *Competency Builders:*

7.8.1.1 Define lifelong learning

7.8.1.2 Identify factors that cause the need for lifelong learning

#### **Competency 7.8.2: Adapt to change**

##### *Competency Builders:*

7.8.2.1 Analyze the effects of change

7.8.2.2 Identify reasons why goals change

7.8.2.3 Describe the importance of flexibility when reevaluating goals

7.8.2.4 Evaluate the need for continuing education/training

## **Unit 7: Employability Skills**

### **Subunit 7.9: Economic Education**

#### **Competency 7.9.1: Analyze global enterprise system**

##### *Competency Builders:*

7.9.1.1 Identify characteristics of various enterprise systems

7.9.1.2 Examine the relationship between competition, risk, and profit

7.9.1.3 Illustrate how supply and demand influence price

#### **Competency 7.9.2: Evaluate personal money management**

##### *Competency Builders:*

7.9.2.1 Describe the need for personal management records

7.9.2.2 Identify methods of taxation

7.9.2.3 Analyze how credit affects financial security

7.9.2.4 Compare types and methods of investments

7.9.2.5 Prepare a personal budget

7.9.2.6 Be an informed and responsible consumer

7.9.2.7 Analyze the effects of advertising on the consumer

## **Unit 7: Employability Skills**

### **Subunit 7.10: Balancing Work and Family**

#### **Competency 7.10.1: Analyze the effects of family on work**

*Competency Builders:*

- 7.10.1.1 Recognize how family values, goals, and priorities are reflected in the workplace
- 7.10.1.2 Identify present and future family structures and responsibilities
- 7.10.1.3 Describe personal and family roles
- 7.10.1.4 Analyze concerns of working parent(s)
- 7.10.1.5 Examine how family responsibilities can conflict with work
- 7.10.1.6 Resolve family-related conflicts
- 7.10.1.7 Explain how to use support systems/community resources to help resolve family-related conflicts

#### **Competency 7.10.2: Analyze the effects of work on family**

*Competency Builders:*

- 7.10.2.1 Identify responsibilities associated with paid and nonpaid work
- 7.10.2.2 Compare the advantages and disadvantages of multiple incomes
- 7.10.2.3 Explain how work can conflict with family responsibilities
- 7.10.2.4 Explain how work-related stress can affect families
- 7.10.2.5 Identify family support systems and resources

## **Unit 7: Employability Skills**

### **Subunit 7.11: Citizenship in the Workplace**

#### **Competency 7.11.1: Exercise the rights and responsibilities of citizenship in the workplace**

*Competency Builders:*

- 7.11.1.1 Identify the basic rights and responsibilities of citizenship
- 7.11.1.2 Examine the history and contributions of all racial, ethnic, and cultural groups

#### **Competency 7.11.2: Cooperate with others in the workplace**

*Competency Builders:*

- 7.11.2.1 Identify situations in which compromise is necessary
- 7.11.2.2 Examine how individuals from various backgrounds contribute to work-related situations
- 7.11.2.3 Demonstrate initiative to facilitate cooperation
- 7.11.2.4 Give and receive constructive criticism to enhance cooperation

## **Unit 7: Employability Skills**

### **Subunit 7.12: Leadership**

#### **Competency 7.12.1: Evaluate leadership styles appropriate for the workplace**

##### *Competency Builders:*

- 7.12.1.1 Identify characteristics of effective leaders
- 7.12.1.2 Compare leadership styles
- 7.12.1.3 Demonstrate effective delegation skills
- 7.12.1.4 Identify opportunities to lead in the workplace

#### **Competency 7.12.2: Demonstrate effective teamwork skills**

##### *Competency Builders:*

- 7.12.2.1 Identify the responsibilities of a valuable group member
- 7.12.2.2 Exhibit open-mindedness
- 7.12.2.3 Identify methods of involving each member of a team
- 7.12.2.4 Contribute to the efficiency and success of a group
- 7.12.2.5 Determine ways to motivate others

#### **Competency 7.12.3: Utilize effective communication skills**

##### *Competency Builders:*

- 7.12.3.1 Identify the importance of listening
- 7.12.3.2 Demonstrate assertive communication
- 7.12.3.3 Recognize the importance of verbal and nonverbal cues and messages
- 7.12.3.4 Analyze written material
- 7.12.3.5 Prepare written material
- 7.12.3.6 Give and receive feedback
- 7.12.3.7 Articulate thoughts
- 7.12.3.8 Use appropriate language

## **Unit 7: Employability Skills**

### **Subunit 7.13: Entrepreneurship**

#### **Competency 7.13.1: Evaluate the role of small business in the economy**

##### *Competency Builders:*

- 7.13.1.1 Identify the benefits of small business to a community
- 7.13.1.2 Analyze opportunities for small business in a community

#### **Competency 7.13.2: Examine considerations of starting a business**

##### *Competency Builders:*

- 7.13.2.1 Research a business idea
- 7.13.2.2 Compare various ways to become a small business owner
- 7.13.2.3 Investigate factors to consider in financing a new business
- 7.13.2.4 Evaluate entrepreneurship as a career option

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