
Appendix A



WINN'S CAREER EDUCATION, Inc.

PLUMBER

O*NET-SOC CODE: 47-2152.00

RAPIDS CODE: 0432HY

WORK PROCESS SCHEDULE

AND

RELATED INSTRUCTION OUTLINE



Appendix A

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This schedule is attached to and a part of these Standards for the above identified occupation.

1. APPRENTICESHIP APPROACH

☐ Time-based ☐ Competency-based ☒ Hybrid

2. TERM OF APPRENTICESHIP

The term of the apprenticeship is approximately four (4) years with an OJL attainment of 6,375 – 8,000 hours, supplemented by the minimum required 576 hours of related instruction (minimum 144 hours annually).

3. RATIO OF APPRENTICES TO JOURNEYWORKERS

The apprentice to journeyworker ratio is: 1 Apprentice to 1 Journeyworker. (1:1)

4. APPRENTICE WAGE SCHEDULE

Apprentices shall be paid a progressively increasing schedule of wages based on either a minimum percentage or a dollar amount of the current hourly journeyworker wage rate, which is: \$30 or as specified in each Appendix D - *Employer Acceptance Agreement*.

Term: 6,375 – 8,000 Hours

1st 1,600 – 2,000 hrs = (min) 55 % of journeyworker's rate & fringe benefit payments

2nd 1,600 – 2,000 hrs = (min) 65 % of journeyworker's rate & fringe benefit payments

3rd 1,600 – 2,000 hrs = (min) 75 % of journeyworker's rate & fringe benefit payments

4th 1,575 – 2,000 hrs = (min) 85% of journeyworker's rate & fringe benefit payments

The percentages shown above are minimums based on the geographic/market area of each employer, representing minimums which may be adjusted as market rates dictate at the employer's discretion, as specified in their Appendix D - *Employer Acceptance Agreement*.

5. PROBATIONARY PERIOD

Every applicant selected for apprenticeship will serve a probationary period of the first 1,500 hours of OJL.

6. SELECTION PROCEDURES

Incumbent Workers will be offered Apprenticeship opportunity only after successfully completing 30 consecutive days of employment with their company. After that initial employment period with their company, ANY apprentice nominated for enrollment by a participating employer will be accepted into the program.



WORK PROCESS SCHEDULE

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This work process schedule is attached to and a part of the Apprenticeship Standards for the above identified occupation. This instruction and experience shall include the following hours, not necessarily in the listed sequence. Ranges are given to allow for local/regional demands and employer work availability. Time spent on specific operations is approximate and need not be continuous.

Work Process:	Approximate Hours:
Area of Work Experience	Hours
Proper/safe use of tools, materials, and equipment <ul style="list-style-type: none"> • Basic awareness as well as use of industry tools & equipment • Common materials (and alternatives) used in the industry • Proper storage & disposal of common industry materials • Proper maintenance of industry tools & equipment 	1,060 – 1,330
Hazard awareness, safe work practices, and personal protective equipment <ul style="list-style-type: none"> • Introduction to construction safety (OSHA 10 or equivalent) • Identification & use of common industry personal protective equipment • Hazardous material handling and storage (including SDS utilization) • Situational awareness for the protection of self & others 	1,063 – 1,334
Job layouts, material planning, and job-related math <ul style="list-style-type: none"> • Basic construction & industry specific math • Blueprint & other industry drawing interpretation • Basic material planning & scheduling • Project management, scheduling, estimating and reporting 	1,063 – 1,334
Interaction with management, supervisors, and/or customers <ul style="list-style-type: none"> • Receiving company and/or project level guidance • Receiving task level directions, clarifying, and communicating needs • Responding to customer service inquiries or requests • Engaging in professional communication (speaking, written, electronic) 	1,063 – 1,334
New installations/projects <ul style="list-style-type: none"> • Determining project requirements (customer, company, contractor) • System planning, sizing, and configuration • Regulatory compliance (licenses, permits, inspections) • Final documentation & hand-off to owner 	1,063 – 1,334
Troubleshooting, warranty, service and/or repair <ul style="list-style-type: none"> • Identification & compliance with manufacturer's instructions • Warranty claim identification & preparation • Troubleshooting & diagnosis of system/project challenges • Final start-up & punch-out procedures 	1,063 – 1,334
Total Required Hours	6,375 – 8,000



RELATED INSTRUCTION OUTLINE

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Instruction can incorporate elements of both electronic media and traditional classroom including online training, distance learning, or independent study of established curriculum. Each year includes a minimum of 144 hours of instruction. Curricula modules are based on industry standardized applications of current construction practices. Modules are knowledge and skill based including a system for assessment. The assessment will include task objectives, procedures, review materials, and competency-based performance tests.

Related Instruction Descriptions:

Approximate Hours:

Year 1	
Introduction to the Plumbing Profession	05
Plumbing & General Construction Safety	22
Tools of the Plumbing Trade	10
Introduction to Plumbing Math	12
Introduction to Plumbing Drawings	17
Plastic Pipe & Fittings	12
Copper Tube & Fittings	12
Cast-Iron Pipe & Fittings	12
Carbon Steel Pipe & Fittings	12
Introduction to Plumbing Fixtures	10
Introduction to Drain, Waste & Vent (DWV) Systems	10
Introduction to Water Distribution Systems	10
Total Year 1, Level One Curriculum	144

Year 2	
Plumbing Math Two	15
Reading Commercial Drawings	20
Structural Penetrations, Insulation, and Fire Stopping	15
Installing and Testing DWV Piping	20
Installing Roof, Floor, and Area Drains	05
Installing and Testing Water Supply Piping	15
Type of Valves	04
Installing Fixtures and Valves	15
Installing Water Heaters	10
Basic Electricity	10
Fuel Gas and Fuel Oil Systems	15
Total Year 2, Level Two Curriculum	144

Year 3	
Applied Math	18
Sizing Water Supply Piping	17



Potable Water Treatment	15
Backflow Preventers	20
Types of Venting	20
Sizing DWV and Storm Systems	20
Sewage Pumps and Sump Pumps	18
Corrosive-Resistant Waste Piping	06
Compressed Air	10
Total Year 3, Level Three Curriculum	144

Year 4	
Business Principles for Plumbers	14
Introductory Skills for the Crew Leader	15
Water Pressure Booster and Recirculation	15
Indirect and Special Waste	15
Hydronic and Solar Heating Systems	15
Codes	10
Private Water Supply Well Systems	10
Private Waste Disposal Systems	10
Swimming Pools and Hot Tubs	10
Plumbing for Mobile Homes and Travel Trailers	10
Introduction to Medical Gas & Vacuum Systems	20
Total Year 4, Level Four Curriculum	144
Total Required Hours	576

INTERIM CREDENTIAL (Residential Plumber)

At the request of the Employer and/or Apprentice, an Interim Credential may be issued after the apprentice has completed a minimum of 3,200 hours of OJL as well as the first two years/levels of related instruction totaling 288 hours. In order to establish successful completion of the interim requirements, the Sponsor will collect certification of at least the minimum OJL hours from the apprentice's employer(s), passing scores from each module exam in the first two years of the related instruction, as well as certification of hands-on competency in each module's core topic by a Journeyworker (or equivalent) member of the trade.

This interim credential is intended to document progress toward Journeyworker level in trades which allow increasing responsibility before the Journeyworker level is achieved (i.e. tradesman, technician, residential vs commercial, etc.).