

**Pipe Trades Training Center 2022-23  
Apprenticeship Standards -  
Summary of Changes**

Updated minor semantics and punctuation (throughout document)

Updated date from 2018-19 to 2022-2023 (throughout document)

Updated Training Coordinator to Coordinator (throughout document)

Updated from Governor's Office of Workforce Innovation (GOWINN) to Nevada State Apprenticeship Council (throughout document)

Updated references to 29 CFR to include NRS 610 (throughout document)

Updated name from The Pipe Trades Joint Apprentice and Journeyman Training to Las Vegas Plumbers and Pipe fitters Local Union 525 Apprentice and Journeyman Training Trust (throughout document)

Updated the JATC Members (Page 3): Removed Gary Lovewell & Steve Martinson.  
Added Tim Marshment and James Cavaness

Updated Table of Contents page numbering (Page 4)

Updated staff instructors (Page 5)

Updated State Apprenticeship office address to 3300 W. Sahara Avenue, Suite 425, Las Vegas, NV 89102 (Page 25)

Updated Attachment 1 - Work Processes, I. Schedule of Work Experience for Apprentices (Page 30):

- 10. Hydronic replaced HVAC
- 11. Steam replaced Refrigerant 450 hrs - 650 hrs updated to 725 hrs - 1125 hrs.
- Removed #12 Refrigeration and Equipment Controls 275 hrs – 475 hrs.

Added under Attachment 5 – Selection Procedure “The applicant must pass the application math test” to 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> paragraphs (Page 37) and as item “a” (Page 37)

Added under Attachment 5 – Selection Procedure information on Employee of a non-signatory employer possessing demonstrated skill set. (Page 38).

Changed desired to maintain under “Grades and Certifications” 1st paragraph (Page 40)

Changed under Attendance, number 4 make-up class times from “last Saturday or each month” to “designated date of a month” (Page 41) and under Make-Up Classes, 1<sup>st</sup> paragraph (Page 42)

Removed from under Holidays (Page 43) Martin Luther King Day exception due to now is considered a holiday per the Master Labor Agreement.

Updated under “Union Membership Information” initiation fee. (Page 49)

Updated under “Apprentice Evaluation and Apprentice Work Progress Report Policy”  
Signatures of Apprentice Representative to include Foreman and General Foreman. (Page 52)

### **Adjusted hours of Apprentice Work Progress Reports (Page 55-57)**

- Use and Care of Tools from 500-650 to 650-850 hrs
- Safety from 200-300 to 250-450 hrs
- Copper soldering and Brazing from 1000-1300 to 1268-1468 hrs
- Drainage, Waste and Vent and Roof Drains – All Materials from 1100-1400 to 1317-1517 hrs
- Plumbing Fixtures and Layout from 900-1100 to 1042-1242 hrs
- Process Piping – Air, Gas, Liquids, etc. from 550-850 to 768-968 hrs
- Rigging and Pipe Supports from 300-500 to 418-618 hrs
- Pipe Welding Layout from 300-550 to 493-693 hrs
- Welding and Oxygen and Acetylene Cutting from 300-600 to 444-644 hrs
- HVAC Piping and Equipment 950-1250 hrs to Hydronic Piping and Equipment - All Materials 1125-1325 hrs
- Refrigerant Piping 300-550 hrs to Steam Piping – All Materials 725-1125 hrs  
And added verbiage of “This process includes the laying out, installation insulation, start up, and maintenance of any pipe, fittings, hangars, equipment, etc., used for the purpose of heating, venting, and air conditioning. This process includes all types of approved pipe, fittings, equipment, etc. This includes heating, cooling, and condensate lines.”

### **Adjusted First Year curriculum subject hours (Page 61):**

Job Safety	Job Safety & Health	15 hrs	From 16.5 hrs
Trade Math	Related Mathematics	42 hrs	From 40.5 hrs
Rigging	Rigging Manual	24 hrs	From 25.5 hrs
Related Science	Related Science	24 hrs	From 21 hrs
Blueprint Reading and Drawing	Drawing Interpretation and Plan Reading	24 hrs	From 25.5 hrs
Pipe and Fitting Recognition	Pipe, Fittings, Valves, Supports and Fasteners	42 hrs	From 40.5 hrs
Soldering and Brazing	Soldering and Brazing Manual	30 hrs	From 31.5 hrs

**Adjusted Second Year curriculum subject hours (Page 62):**

Drainage	Drainage 2012 UPC Illustrated Manual	54 hrs	From 40 hrs
Water Supply	Water Supply 2012 UPC Illustrated Manual	54 hrs	From 50 hrs
Plumbing Fixtures and Appliance	Plumbing Fixtures and Appliances	54 hrs	From 45 hrs
Gas Systems	Gas Systems	54 hrs	From 60 hrs
Braze		27 hrs	From 48 hrs

**Adjusted Third Year curriculum subject hours (Page 63):**

Oxy-Fuel Cutting and Welding SMAW	Oxy-Fuel Cutting and Welding and Shielded Metal Arc Welding Manual	177 hrs	From 182 hrs
Pipefitting		66 hrs	From 61 hrs

**Updated Fourth Year courses and Adjusted curriculum subject hours (Page 64-65):****Combined EPRI Rigging and Crane Signaling****A. EPRI Rigging and Crane Signaling**

EPRI Rigging certification is required for work on industrial sites as a rigger or as rigging supervisor. The program explains the complexities of working safely as rigging specialists and of piping industry requirements. Work site safety and the latest proven rigging techniques are primary areas of focus. Participants will receive instruction in the safe use and inspection of tools, equipment, and overhead cranes, and in the requirements for setup of mobile hoisting equipment. All appropriate ASME and OSHA requirements will be addressed in this course.

The Crane Signaling course will promote uniform administration and enforcement of UA Crane Signal Person qualifications and certifications, and promote a level of qualification standard, which will support safety, quality, and economical Crane Signal Person activities. In addition to classroom training, hands-on crane signaling practical exercises are required to be completed by each trainee.

Added Tube Bending verbiage

**A. Tube Bending**

This course will consist of the fabrication of instrument tubing using the SOG Method (Set Advanced Gain) to layout angles, offsets and other appropriate fabrications.

REMOVED "Refrigeration & HVAC"

EPRI Rigging & Crane Signaling		87 hrs	combined
Tube Bending		20 hrs	From 12 hrs
Steam Systems	Steam Systems	48 hrs	From 60 hrs
Hydronic Systems	Hydronic Heating and Cooling Manual	48 hrs	From 60 hrs
Pumps	Pumps Manual	40 hrs	From 24 hrs

**Updated Fifth Year courses and Adjusted curriculum subject hours (Page 66-67):**

Removed Medical Gas and Refrigeration/HVAC  
Added OSHA 30

Uniform Plumbing Code	2012 Uniform Plumbing Code Published By IAPMO	98 hrs	From 96 hrs
Advanced Plan Reading and Related Drawing	Advanced Plan Reading and Related Drawing Manual	56 hrs	From 45 hrs
OSHA 30		36 hrs	Removed Medical Gas