



Construction Trades Curriculum Map CIP # 46.9999

INDUSTRY STANDARDS
Osha 10
Ladder Safety (Articulated)
Ladder Safety (Single & Extension)
Ladder Safety (Step)
Ladder Safety (Mobile)

L e v e l 1	<p>1st Quarter Safety 101- Follow OSHA standards 102- Explain hazard communications 103- Work with hazardous materials 104- Use personal protective equipment 105- Rules and regulations for fire protection 106- Handle and store construction materials 110- Differentiate struck by / caught in hazards 111- Working from heights safety procedures 116- Safety Procedures for confined spaces OSHA-10 CERTIFICATION</p>	<p>2nd Quarter Carpentry 115- Use ladders and scaffolding 301- Operate a circular saw 302- Operate battery and electric drills 303- Operate belt and hand sanders 307- Operate a miter saw 308- Operate a table saw 801-807- Floor Framing 901-904- Wall Framing LADDER SAFETY - ARTICULATED LADDER SAFETY - SINGLE & EXTENSION LADDER SAFETY - STEP LADDER SAFETY - MOBILE</p>	<p>3rd Quarter Electrical/Plumbing 109- Follow electrical safety procedures 1501- Identify electrical hazards/practice safety 1502- Apply the National Electric Code (NEC) 1503- Interpret Electrical drawings 1504- Apply Electrical theory 1505- Construct Electrical circuits 1506- Use various wire types and sizes 1507- Use Electrical tools 1508-1516- Install ground fault circuit interrupters, arc fault circuit interrupters, overcurrent protection devices, various electrical boxes, various light fixtures, various receptacle circuits. 1518- Trim out and finish electrical circuits 1519- Identify service entrance installation 1520- Install low voltage electrical circuits 1521- Install electrical panel installation 1401-1412- Basic Plumbing</p>	<p>4th Quarter Masonry 112- Follow excavation site safety procedures 114- Concrete and masonry safety procedures 701- Describe the common types of masonry units 702- Identify concrete block by size and type 703- Estimate units needed for block construction 704- Use masonry cutting techniques 705- Layout and construct a block laying project 706- Perform various masonry positions and bonds 707- Lay block to a line 708- Install masonry fasteners 710- Mix mortar to proper proportions and consistency 711- Compare mortar types and applications 712- Perform proper brick and block laying techniques 713- Install block or brick walls</p>
L e v e l 2	<p>1st Quarter Safety & Tools 101-116- Construction Trades Safety 201-206- Hand Tools 301-311- Power Tools and Equipment</p>	<p>2nd Quarter Carpentry 304- Operate reciprocating saws 305- Operate routers 306- Operate pneumatic nailers 309- Operate and electric planer 502- Square a structure using Pythagorean Theorem 901-904- Wall Framing 1001-1006- Roof Framing 1101-1104- Roof Coverings 1301-1308- Exterior Finishes</p>	<p>3rd Quarter Electrical/Plumbing 1501-1521- Residential Electric Circuits and Components 1401- Use and maintain basic plumbing tools 1403- Identify and estimate different types of pipes and fittings. 1405- Install various types of pipes, fittings 1406- Install faucets and drain assemblies 1409- Install water supply systems 1410- Install drain, waste and vent systems. 1411- Install fixtures and equipment 1412- Troubleshoot and repair common plumbing problems</p>	<p>4th Quarter Concrete 601- Use modern concrete materials 602- Determine concrete finishing processes 603- Estimate concrete needed footers and slabs 604- Lay out and build concrete forms 605- Use equipment and tools for concrete 606- Prep and place concrete 607- Perform basic concrete finishing processes 608- Use tools to edge, groove, and cut concrete</p>
L e v e l 3	<p>1st Quarter Safety & Tools 101-116- Construction Trades Safety 201-206- Hand Tools 301-311- Power Tools and Equipment</p>	<p>2nd Quarter Carpentry 901-904- Wall Framing 1001-1006- Roof Framing 1101-1104- Roof Coverings 1301-1308- Exterior Finishes 1001-1006- Roof Framing 1801-1803- Stairways</p>	<p>3rd Quarter Interiors 1201- Install various types of insulation and ventilation. 1202- Identify and estimate different types of insulation and ventilation. 1701- Identify and estimate different types of paints, stains and their uses 1702- Apply different paints and stains to different surfaces 1703- Clean painting tools 1705- Apply various types of caulking 1706- Install ceramic tile</p>	<p>4th Quarter Plans and Blueprints 401- Interpret building codes, zoning regulations and permits 403- Interpret plans, sketches and blueprints. 404- Interpret standard abbreviations and symbols 405- Estimate material from a print 406- Use an architect scale 407- Identify structural components 408- Interpret Americans with Disabilities Act (ADA) regulations Site and Building Layout 501- Use a builder's level, transit, laser to determine site 502- Square a structure using Pythagorean Theorem</p>

Items highlighted in *Yellow* indicate Certifications available to students.