# Cabinetmaking & Millwork CIP 48.0703

# Competency Task List

## 100 Personal Safety

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 101 | Follow safety rules for working in the cabinetmaking lab. |  |  |
| 102 | Use cabinetmaking tools and equipment. |  |  |
| 103 | Follow rules for electrical safety. |  |  |
| 104 | Follow rules for fire safety. |  |  |
| 105 | Follow rules for general housekeeping. |  |  |
| 106 | Follow rules for material handling safety. |  |  |
| 107 | Follow rules for eye protection. |  |  |
| 108 | Follow rules for hearing protection. |  |  |
| 109 | Follow rules for respiratory protection. |  |  |
|  | RESERVED (110-112) |  |  |
| 113 | Follow rules for Safety Data Sheets (SDS). |  |  |
| 114 | Follow rules for exposure control procedures such as blood borne pathogens. |  |  |
|  | RESERVED (115) |  |  |

## 200 Lumber & Cabinetmaking Materials

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 201 | Identify parts of the tree. |   |   |
| 202 | Describe methods of sawing timber into lumber. |   |   |
| 203 | Explain methods of drying green lumber. |   |   |
| 204 | Describe and identify defects in lumber. |   |   |
| 205 | Identify various types of wood and lumber used to build cabinets. |   |   |
| 206 | Explain how cabinet lumber is graded. |   |   |
| 207 | Identify cabinet lumber and construction grade lumber. |   |   |
| 208 | Identify particle board. |   |   |
| 209 | Identify medium density fiberboard. |   |   |
|  | RESERVED (210) |   |   |
| 211 | Identify veneer core plywood. |   |   |
| 212 | Identify plastic laminates. |   |   |
| 213 | Identify solid surface materials. |  |  |
| 214 | Identify melamine. |  |  |

## 300 Blueprints

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 301 | Use blueprint trade terminology. |   |   |
|  | RESERVED (302) |   |   |
| 303 | Draw and dimension a base cabinet and wall cabinet to scale using an architect’s ruler. |   |   |
|  | RESERVED (304) |   |   |
|  | RESERVED (305) |  |  |
| 306 | Draw a multiple view blueprint of a cabinet. |  |  |
| 307 | Draw a floor plan. |  |  |
| 308 | Read a floor plan. |  |  |
| 309 | Design a kitchen. |  |  |
|  | RESERVED (310) |  |  |
| 311 | Lay out stock for cabinets. |  |  |
| 312 | Create a bill of materials. |  |  |
| 313 | Use design software. |  |  |

## 400 Hand Tools

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 401 | Demonstrate the ability to measure. |   |   |
| 402 | Lay out an arc or circle with trammel points. |   |   |
| 403 | Identify various types of hand planes.  |  |  |
|  | RESERVED (404) |  |  |
|  | RESERVED (405) |  |  |
| 406 | Use a file to sharpen edges.  |  |  |
| 407 | Use a compass. |  |  |
| 408 | Use a framing square. |  |  |
| 409 | Square an angle with a try square. |  |  |
| 410 | Use a combination square. |  |  |
| 411 | Transfer an angle with a sliding T-bevel square. |  |  |
| 412 | Use a level to check plumb and level. |  |  |
|  | RESERVED (413) |  |  |
| 414 | Use various handsaws. |  |  |
| 415 | Use chisels. |  |  |
| 416 | Use a screwdriver to install screws. |  |  |
| 417 | Follow rules for hand tool safety. |  |  |
| 418 | Use various hammers.  |  |  |
| 419 | Sharpen cutting or shaping tools. |  |  |

## 500 Reserved

## 600 Stationary Power Equipment

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 601 | Use a jointer. |   |   |
| 602 | Use a surface planer. |   |   |
| 603 | Use a table saw. |   |   |
|  | RESERVED (604) |   |   |
| 605 | Use a band saw. |  |  |
| 606 | Use a spindle sander. |  |  |
| 607 | Use a disc sander. |  |  |
| 608 | Use a hollow chisel mortiser. |  |  |
|  | RESERVED (609) |  |  |
| 610 | Use a drill press. |  |  |
| 611 | Use a shaper. |  |  |
| 612 | Use a wide belt sander. |  |  |
| 613 | Use a grinding machine.  |  |  |
| 614 | Use clean-out procedures for a dust collection system. |  |  |
| 615 | Use a router table.  |  |  |
| 616 | Follow rules for power equipment safety. |  |  |
| 617 | Use a pocket hole machine.  |  |  |
| 618 | Use an edge bander. |  |  |

## 700 Reserved

## 800 Portable Power Tools

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 801 | Use a portable belt sander. |   |   |
| 802 | Use a finish sander. |   |   |
| 803 | Use a drill. |   |   |
| 804 | Use a router. |   |   |
| 805 | Use a circular saw. |  |  |
| 806 | Use a jigsaw. |  |  |
| 807 | Use a laminate trimmer. |  |  |
| 808 | Use a biscuit joiner or loose tenon power tool. |  |  |
| 809 | Use brad and finish nail pneumatic fastening tools. |  |  |
| 810 | Use a miter saw or a compound miter saw. |  |  |
| 811 | Follow rules for portable power tool safety. |  |  |

## 900 Machining and Related Operations

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 901 | Glue boards edge to edge. |   |   |
|  | RESERVED (902) |   |   |
|  | RESERVED (903) |   |   |
| 904 | Calculate and construct a drawer. |   |   |
| 905 | Calculate and construct a face frame. |  |  |
| 906 | Calculate and construct a panel door. |  |  |
| 907 | Calculate and construct a wall cabinet. |  |  |
| 908 | Fabricate moldings.  |  |  |
| 909 | Calculate and construct a base cabinet. |  |  |
| 910 | Square stock to specified dimensions. |  |  |

## 1000 Cutting and Shaping Common Wood Joints

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
|  | RESERVED (1001) |   |   |
| 1002 | Construct dado and groove joints. |   |   |
| 1003 | Construct dowel joints. |   |   |
| 1004 | Construct miter joints. |   |   |
| 1005 | Construct mortise and tenon joints. |  |  |
| 1006 | Construct rabbet joints. |  |  |
| 1007 | Construct dove tail joints. |  |  |
| 1008 | Construct half-lap joints. |  |  |
|  | RESERVED (1009-1011) |  |  |
| 1012 | Construct pocket hole joint. |  |  |

## 1100 Glues and Adhesives

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1101 | Follow safety rules for working with adhesives. |   |   |
| 1102 | Identify various glues and adhesives. |   |   |
| 1103 | Apply glues and adhesives. |   |   |
|  | RESERVED (1104) |   |   |
|  | RESERVED (1105) |  |  |

## 1200 Plastic Laminates

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1201 | Cut plastic laminates to size. |   |   |
| 1202 | Trim edges. |   |   |
| 1203 | Apply adhesives. |   |   |
| 1204 | Apply laminate to substrate. |   |   |
| 1205 | Cap edges of substrates with laminates. |  |  |
| 1206 | Construct a laminate joint. |  |  |
| 1207 | Clean laminated plastics. |  |  |

## 1300 Procedures for Assembly

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
|  | RESERVED (1301-1305) |   |   |
| 1306 | Demonstrate the appropriate use of clamps. |  |  |
| 1307 | Assemble casework using clamping devices. |  |  |
| 1308 | Reinforce joints with blocks. |  |  |
| 1309 | Fasten parts with screws. |  |  |
| 1310 | Attach moldings. |  |  |
|  | RESERVED (1311) |  |  |

## 1400 Hardware Installation

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1401 | Lay out and measure for proper mounting of hardware. |   |   |
| 1402 | Cut a gain for a hinge. |   |   |
| 1403 | Install drawer slides. |   |   |
| 1404 | Install knobs and pulls. |   |   |
| 1405 | Install various types of catches. |  |  |
| 1406 | RESERVED |  |  |
| 1407 | Install various types of hinges. |  |  |
| 1408 | Identify various types of mechanical fasteners. |  |  |

## 1500 Computer Numerical Controlled (CNC) Machines

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1501 | Follow safety rules for operating Computer Numerical Controlled (CNC) equipment. |   |   |
| 1502 | Establish a tool path for the cutter. |   |   |
| 1503 | Install and remove cutters. |   |   |
| 1504 | Use of Computer Numerically Controlled (CNC) design and machine software. |   |   |

## 1600 Finishing Procedures

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
|  | RESERVED (1601) |   |   |
|  | RESERVED (1602) |   |   |
| 1603 | Sand and abrade with various grits of abrasive papers.  |   |   |
|  | RESERVED (1604-1609) |   |   |
| 1610 | Apply stains with a brush or a cloth. |  |  |
| 1611 | Clean brushes after applying a finish. |  |  |
| 1612 | Follow safety procedures when using spray equipment. |  |  |
| 1613 | Maintain a spray gun. |  |  |
| 1614 | Apply finish using a spray gun. |  |  |
| 1615 | Troubleshoot and correct problems that occur in the finishing process. |  |  |
| 1616 | Properly prepare wood product for finishing. |  |  |
| 1617 | Apply under coat and top coat finishes. |  |  |

## 1700 Installation

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1701 | Install a wall cabinet. |   |   |
| 1702 | Install a base cabinet. |   |   |
| 1703 | Install a countertop. |   |   |
| 1704 | Install moldings. |   |   |

1 Student Demonstrated Entry-Level Industry Proficiency as Indicated by (X)

Secondary CTE Instructor Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[PA In-Demand Occupations List (PA IDOL)](https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.workstats.dli.pa.gov%2FProducts%2FIDOL%2FPages%2Fdefault.aspx&data=04%7C01%7Celw12%40psu.edu%7C465d2f58a43f45631dac08d9e0349a4c%7C7cf48d453ddb4389a9c1c115526eb52e%7C0%7C0%7C637787338795980555%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=yZW%2BaPOFwIBGxV3Jk72%2BGXlAbGWgkjCVKy%2FQtYol1F0%3D&reserved=0)

[Industry-Recognized Credential Resource Guide](https://www.education.pa.gov/K-12/Career%20and%20Technical%20Education/Resources/Teacher%20Resources/IndustryRecognized/Pages/default.aspx)