



## Woodwork Career Alliance Correlation Chart



The content of the text and Lab Workbook correlates to Woodwork Career Alliance (WCA) skill standards. The WCA establishes a benchmark to measure and recognize an individual's skills and knowledge. The WCA skill standards help ensure that students are prepared for rigorous industry standards, and provide a pathway for advancement for professional woodworkers.

The WCA skill standards define the minimum requirements for specific woodworking machine operations. Using the WCA skill standards in a wood training program can help you, your students, and your program obtain industry recognition. The *Modern Cabinetmaking* textbook and Lab Workbook are correlated to the performance standards, helping prepare your students for certification.

## 2. Sawing

### Sawing Considerations

- Pre-Operation Checklist is a prerequisite for ANY operation.
- Demonstrates knowledge and proper use of all machine specific controls.
- Stock is fed in smooth, continuous motion past blade with proper feed rate while controlling stock movement and waste removal.
- Stock is supported at outfeed.
- Push stick is used when required.
- Blade is completely stopped before reaching to the rear or over it.
- Proper stance and hand position are demonstrated.
- Stock is held securely against the fence, jig, or fixture as appropriate.
- Material is pushed completely past the blade before releasing it.
- Fall off is not allowed to clutter outfeed table.
- Clears machine and cleans work area after operation.
- Required OSHA-approved personal protective equipment is worn.
- Lock-out/tag-out procedure is in place and followed.
- Process is completed in a timely manner.

- Tool/machine manufacturer's safety rules and guidelines are followed.
- Tooling requirements are reviewed and appropriate tooling on the machine verified.
- Operator does not reach into the machine processing area while the machine is in operation.
- Stock is held securely.
- Operator clears machine and cleans work area after use.
- Stock is supported and secured from movement.
- Hand remains firmly on saw throughout entire cut.
- Saw is moved in smooth, continuous motion.
- Appropriate stance and hand position are utilized for optimum balance and control.
- Saw is pointed away from body while cutting.
- Free hand is clear of saw travel.
- Protects delicate saw teeth and cleans work area after operation.
- Stock is supported at infeed and outfeed.
- Operator is aware of work zone and safety precautions to others.
- Correct body posture utilized during machine operation.
- Operate machine safely, standing clear of kickback zone.
- Material properly staged at infeed and outfeed.
- Criteria/Performance standard requirements will apply to all operations, unless otherwise noted.
- Material is suitable for its intended purpose and checked prior to cutting for bowing, cupping, twisting, surface cracks, knots, sap, wood worm, grub holes, rocks, staples, nails, and gun shot.
- Initial trimmed cut edge is evident on entire length of material and exhibits smooth uniform saw marks with minimal burning and no back cut heeling.
- Trimmed edges are straight and parallel.
- Blade is fed in smooth, continuous motion through stock with proper feed rate while controlling stock movement and waste removal.
- Fence is positioned clear of cut-off when crosscutting.

## Band Saw

Pre-Operation Checklist				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1		Verifies tool is properly guarded.	Chapter 23	
		Verifies proper throat plate is installed and properly aligned with surface of table.	Chapter 23	
		Ensures dust collection operable/operating.	Chapter 23	
2		Selects and properly installs correct blade.	Chapter 23	
		Installs and properly adjusts blade guard assembly to within 6 mm (1/4") [0.25"] of the given material.	Chapter 23	
		Installs and properly adjusts throat plate.	Chapter 23	
		Installs, adjusts, and securely locks rip fence to specified measurement.	Chapter 23	
		Sets fence properly (dimension, parallel to blade, properly locked down).	Chapter 23	
		Verifies/corrects table at proper angle to blade.	Chapter 23	
		Meets Level 1 performance standard.		

<b>Operation—Rough Saw Parts from a Pattern</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given material, a pattern of a finished part, and machine set up and ready to cut, trace the pattern on the part and make the cut.	Part is sawn out to required shape $+1.6/-0$ mm ( $1/16''$ ) [ $0.0625''$ ] around entire part.	Chapter 23	Section Project 4-6
		Angle of cut is $90^\circ$ to the face.	Chapter 23	Section Project 4-6
		Cut surfaces exhibit uniform saw marks with minimal burn marks.	Chapter 23	Section Project 4-6
		Cut is free of tearout.	Chapter 23	Section Project 4-6
2	Given material, machine, and a pattern of a finished part, set up the saw, trace the pattern on the part, and make the cut.	Meets Level 1 performance standard.		
<b>Operation—Crosscut and Mitering</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given the saw set up with the appropriate blade, and stock of a uniform thickness and width, cut one end of the board to a specified angle.	Part is sawn to specified angle $\pm 0.5^\circ$ .	Chapter 23	Section Project 4-9
		Part is sawn to within $+0.8$ mm/ $-0$ ( $1/32''/0$ ) [ $0.0312''/-0$ ] of a straight line at specified angle.	Chapter 23	Section Project 4-6
2	Given the stock of a uniform thickness and width, set up equipment, cut one end of the board to a specified angle.	Meets Level 1 performance standard.		

<b>Operation—Resaw with a Pivot Block</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given material and machine set up with the appropriate blade and a pivot block, resaw the material to a specified thickness.	Dimension tolerance is $\pm 1.5$ mm (1/16") [0.0625"] in thickness along entire length of material.	Chapter 23	
		Cut surfaces exhibit uniform saw marks with minimal burn marks.	Chapter 23	
		Cut is free of tearout.	Chapter 23	
2	Given machine and material, set up machine and resaw the material to a specified thickness.	Installs and properly adjusts pivot block.	Chapter 23	
		Meets Level 1 performance standard.		
<b>Operation—Ripping with a Fence</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given material with one straight edge and machine set up and ready to cut, rip material to a specified width (> 100 mm [4"]) using the fence.	Dimension tolerance is $\pm 0.8$ mm (1/32") [0.031"] in width along entire length of material.	Chapter 23	Section Project 5-1
		Angle of cut is 90° to the face.	Chapter 23	Section Project 5-1
		Cut surfaces exhibit uniform saw marks with minimal burn marks.	Chapter 23	Section Project 5-1
		Cut is free of tearout.	Chapter 23	Section Project 5-1
2	Given material with one straight edge, set up machine and rip material to a specified width (> 100 mm [4"]) using the fence.	Meets Level 1 performance standard.		

Operation—Resaw with Power Feed				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1	Given suitable stock and the saw set up with the appropriate blade, a rip fence and a power feed mechanism, resaw stock to a specified thickness.	Part is sawn to within +0.8 mm/−0 (1/32"/−0) [0.0312"/−0].	Chapters 23, 38	
2	Given suitable stock, set up equipment, and resaw stock with a power feed mechanism to a specified thickness.	Installs and properly adjusts power feed.	Chapters 23, 38	
		Meets Level 1 performance standard.		

## Dovetail Saw

Pre-Operation Checklist				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1		Ensures operational path has no obstructions to material and operator.	Chapter 22	
		Verifies appropriate saw is selected with rip teeth @ no greater than 6.5 mm [0.25"] kerf.	Chapter 22	
		Verifies area is clear for blade travel.	Chapter 22	
		Demonstrates proper grip and stance.	Chapter 22	
2		Meets Level 1 performance standard.		

<b>Operation—Through Dovetails: 1 &amp; 3</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given 2 pieces of material nom. 1/2" × 3" × 6" properly prepared and marked, and tool ready to cut, execute angle cuts and crosscuts to create the joint.	Angled cuts stop at the scribed line.	Chapter 37	Section Project 4-5
		Angle cuts are perpendicular to face.	Chapter 37	Section Project 4-5
		Shoulder cuts follow and remove the scribed line.	Chapter 37	Section Project 4-5
		Shoulder cuts stop at the angle cut.	Chapter 37	Section Project 4-5
		Cuts are 90° to face of panel.	Chapter 37	Section Project 4-5
		Half-pins rip cut perpendicular to end grain.	Chapter 37	Section Project 4-5
		Half-pin cuts stop at scribed line.	Chapter 37	Section Project 4-5
		Waste material cleaned exactly to scribed line.	Chapter 37	Section Project 4-5
		No gap in assembled joint greater than 1 mm [0.04"].	Chapter 37	Section Project 4-5
2	Given 2 pieces of material nom. 1/2" × 3" × 12", and tool ready to cut, create a 4-sided square box, the sides of which shall exceed 4", with one tail in each corner.	Sides of box equal ±0.8 mm (1/32") [0.0312"].	Chapter 37	
		Sides of box parallel to each other ±0.8 mm (1/32") [0.0312"].	Chapter 37	
		No more than two gaps in whole assembly greater than 1 mm [0.04"].	Chapter 37	
		With the exception of gaps, meets Level 1 performance standard.		

<b>Operation—Half-Blind Dovetail Joints</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given one piece of material nom. 1/2" × 3" × 6" and one piece nom. 3/4" × 3" × 6", properly prepared and marked, and tool ready to cut, execute angle cuts and crosscuts to create a half-blind joint with one tail.	Angle cuts stop at the scribed line.	Chapter 37	Section Project 4-5
		Angle cuts are perpendicular to the face.	Chapter 37	Section Project 4-5
		Shoulder cuts follow and remove scribed line.	Chapter 37	Section Project 4-5
		Cuts are 90° to face of panel.	Chapter 37	Section Project 4-5
		Half-pins rip cuts in perpendicular to end grain.	Chapter 37	Section Project 4-5
		Half-pin cuts stop at scribed line.	Chapter 37	Section Project 4-5
		Waste material cleaned exactly to scribed line.	Chapter 37	Section Project 4-5
		No gap in assembled joint greater than 1 mm (0.4").	Chapter 37	Section Project 4-5
		End tail fits snugly against socket cut in 3/4" material.	Chapter 37	Section Project 4-5
2	Given one piece of material nom. 1/2" × 3" × 18", and one piece nom. 3/4" × 3" × 6", and tool(s) ready to cut, lay out joints and create a 4-sided square box with half-blind joints at the 3/4" board and through dovetails at the opposite end, one tail each corner.	Sides of box are equal ±0.8 mm (1/32") [0.0312"].	Chapter 37	
		Sides of box are parallel to each other ±0.8 mm (1/32") [0.0312"].	Chapter 37	
		No more than 2 gaps in whole assembly greater than 1 mm (0.04").	Chapter 37	
		Ends of tails fit snugly against sockets cut in 3/4" material.	Chapter 37	
		With the exception of gaps, meets Level 1 performance standard.		



## Portable Power Miter Saw

Pre-Operation Checklist				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1		Verifies blade guard is functioning properly.	Chapter 22	
		Confirms blade is installed securely.	Chapter 22	
		Confirms tables are level and square to fence.	Chapter 22	
		Ensures fence is free of obstruction in both directions.	Chapter 22	
		Verifies tool is properly guarded.	Chapter 22	
		Confirms infeed and outfeed tables are level and square to fence.	Chapter 22	
		Verifies arm operation depresses and retracts properly.	Chapter 22	
		Verifies ample clearance for material movement in both directions.	Chapter 22	
2		Calibrates stops (if equipped).	Chapter 22	
		Verifies/adjusts miter/bevel scales, ensuring they are properly calibrated.	Chapter 22	
		Meets Level 1 performance standard.		
Operation—Square Crosscut (90° Miter)				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1	Given material and saw set up and ready to operate, crosscut material to a given length at 90°.	Dimension tolerance is $\pm 0.4$ mm (1/64") [0.0156"].	Chapter 22	Section Project 4-5 Section Project 5-2

		Angle of crosscut is 90° to the edge.	Chapter 22	Section Project 4-5 Section Project 5-2
		Cut surfaces exhibit uniform saw marks without burning or defects.	Chapter 22	Section Project 4-5 Section Project 5-2
		Cut is free of tearout.	Chapter 22	Section Project 4-5 Section Project 5-2
2	Select material and set up saw to crosscut material to a given length at 90°.	Selects and installs appropriate blade.	Chapter 22	
		Sets stops to achieve consistent given length.	Chapter 22	
		Meets Level 1 performance standard.		

Operation—45° Miter				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1	Given material and saw set up and ready to operate, cut linear stock to a given length with opposing 45° ends.	Dimension tolerance is $\pm 0.4$ mm (1/64") [0.0156"] to inside corner of miters.	Chapter 22	Section Project 4-5 Section Project 5-2
		Angle tolerance is $45^\circ \pm 0.5^\circ$ .	Chapter 22	Section Project 4-5 Section Project 5-2
		Angle of cut is $90^\circ$ to the face.	Chapter 22	Section Project 4-5 Section Project 5-2
		Cut surfaces exhibit uniform saw marks without burn or defects.	Chapter 22	Section Project 4-5 Section Project 5-2
		Cut is free of tearout on exposed face of joint.	Chapter 22	Section Project 4-5 Section Project 5-2
2	Select material and set up saw to cut linear stock to a given length with opposing 45° ends.	Selects and installs appropriate blade.	Chapter 23	
		Sets stops to achieve consistent given length.	Chapter 22	
		More stringent angle tolerance is $45^\circ \pm 0.1^\circ$ .	Chapter 22	
		Meets Level 1 performance standards.		

<b>Operation—Scarf Joint</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given material and saw set up and ready to operate, cut profiled trim pieces to create a scarf joint.	Angle tolerance of $\pm 0.5^\circ$ .	Chapters 22, 37	
		Profiled faces are flush $\pm 0.4$ mm (1/64") [0.0156"] when joined together.	Chapters 22, 37	
		Cut is $90^\circ$ to the face $\pm 0.5^\circ$ .	Chapters 22, 37	
		Cut surfaces exhibit uniform saw marks without burn or defects.	Chapters 22, 37	
		Cut is free of tearout.	Chapters 22, 37	
2	Select material and set up saw to cut profiled trim pieces to create a scarf joint.	Appropriate scarf angle is selected.	Chapters 22, 37	
		More stringent angle tolerance is $\pm 0.1^\circ$ .	Chapters 22, 37	
		Cut is $90^\circ$ to the face.	Chapters 22, 37	
		Bevel or angle is set depending on cut to be made flat or vertically.	Chapters 22, 37	
		Meets other Level 1 performance standards.		
<b>Operation—135° Miter</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given material and saw set up and ready to operate, cut profiled trim pieces to create an assembly totaling $135^\circ$ .	Combined angular tolerance (both pieces) $\pm 0.5^\circ$ .	Chapter 22	
		Profiled faces are flush when joined together.	Chapter 22	
		Dimension tolerance is $\pm 0.4$ mm (1/64") [0.0156"].	Chapter 22	
		Cut surfaces exhibit uniform saw marks without burn or defects.	Chapter 22	
		Cut is free of tearout on exposed face of joint.	Chapter 22	

2	Select material and set up saw to cut profiled trim pieces to create an assembly totaling 135°.	Correct blade installed and saw bed is clean.	Chapter 22	
		Saw fence is free from obstructions and calibrated accurately at correct angle setting.	Chapter 22	
		Side tables are level and square.	Chapter 22	
		Meets Level 1 performance standard.		
<b>Operation—Compound Miter</b>				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1	Given material and saw set up and ready to operate, cut crown molding pieces to create a three-piece assembly totaling 90°.	Combined angular tolerance of $\pm 0.5^\circ$ .	Chapter 22	
		Dimension tolerance is $\pm 0.4$ mm (1/64") [0.0156"].	Chapter 22	
		Profiled faces are flush when joined together, $\pm 0.4$ mm (1/64") [0.0156"].	Chapter 22	
		Cut surfaces exhibit uniform saw marks without burn or defects.	Chapter 22	
		Cut is free of tearout on exposed face of joint.	Chapter 22	
2	Select material and set up equipment.	Select and install appropriate blade.	Chapter 22	
		Saw is checked for angle accuracy.	Chapter 22	
		Correct angle/bevel combination is selected (if using a compound miter saw).	Chapter 22	
		Meets Level 1 performance standard.		

## Radial Arm Saw

Pre-Operation Checklist				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1		Verifies tool is properly guarded.	Chapter 23	
		Ensures anti-kickback pawl is in place and properly adjusted.	Chapter 23	
		Verifies dust collection operable/operating.	Chapter 23	
2		Removes blade and installs new one.	Chapter 23	
		Installs and properly adjusts blade guard.	Chapter 23	
		Verifies/corrects head angle and arm angle.	Chapter 23	
		Meets Level 1 performance standard.		
Operation—Crosscut				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1	Given solid stock and the tool set up ready to cut, safely crosscut stock perpendicular to the adjacent edge to specified lengths.	Angle of crosscut is 90° to the edge.	Chapter 23	
		Angle of cut is 90° to the face.	Chapter 23	
		Dimension tolerance for length is $\pm 0.4$ mm (1/64") [0.0156"].	Chapter 23	

		Cut surfaces exhibit uniform saw marks with minimal burn marks.	Chapter 23	
		Cut is free of tearout.	Chapter 23	
2	Given material and machine, set up to crosscut material perpendicular to the adjacent edge to specified lengths.	Sets length stop or stops to yield specified length(s).	Chapter 23	
		Calibrates the head angle and arm angle to 90°.	Chapter 23	
		Meets Level 1 performance standard.		

## Saber Saw

Pre-Operation Checklist				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1		Demonstrates knowledge of and proper use of all tool specific controls.	Chapter 22	
		Ensures operational path has no obstructions to material and operator.	Chapter 22	
		Verifies sole plate is installed correctly and tight.	Chapter 22	
		Verifies area below cutting line is clear for blade travel.	Chapter 22	
		Verifies jigs and/or fixtures are secure and operating effectively.	Chapter 22	
		Verifies switch is off before plugging in tool.	Chapter 22	

2		Installs cutting tool properly.	Chapter 22	
		Verifies cutting tools are secure and free of defects.	Chapter 22	
		Installs and properly adjusts required jigs and fixtures.	Chapter 22	
		Verifies sole plate is free from obstructions and calibrated to 90° with blade.	Chapter 22	
		Meets Level 1 performance standard.		
<b>Operation—Straight Line Cutting</b>				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1	Given material and tool set up and ready to operate, rip or crosscut solid stock or sheet material (> 12" [300 mm]) to a specified dimension.	Material is properly supported in clamp or vice.	Chapter 22	
		Base of saw remains in full, flat contact with stock.	Chapter 22	
		Dimension tolerance of ±0.8 mm (1/32") [0.0312"].	Chapter 22	
		Cut edge is 90° to face of panel.	Chapter 22	
		Cut surfaces exhibit uniform saw marks without burn or defects.	Chapter 22	
		Cut off material is safely supported, without binding or splitting.	Chapter 22	



2	Given material, set up equipment with the proper blade for material being cut, crosscut stock to specified length.	Marks stock to specified dimension/pattern.	Chapter 22	
		Selects and installs proper blade.	Chapter 22	
		Meets Level 1 performance standards.		
<b>Operation—Rectangular Cutout</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given material and tool set up and ready to operate with cutout marked and starting hole bored to accept blade, perform operation.	Material is properly supported in clamp or vice.	Chapter 22	
		Area below cutting line is clear for blade travel.	Chapter 22	
		Base of saw remains in full, flat contact with stock.	Chapter 22	
		Cut edge is 90° to face of panel.	Chapter 22	
		Dimension tolerance of $\pm 0.8$ mm (1/32") [0.0312"].	Chapter 22	
		Cut surfaces exhibit uniform saw marks without burn or defects.	Chapter 22	

2	Given material and a specification for the location of the rectangle, set up equipment with the proper blade for material being cut, lay out stock, and perform cutout operation.	Marks stock to specified dimension/pattern.	Chapter 22	
		Selects and installs proper blade.	Chapter 22	
		Bores starting hole to accept blade.	Chapter 22	
		Meets Level 1 performance standard.		
<b>Operation—Curved Pattern Cutting</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given material and tool set up and ready to operate with cutting pattern marked, perform operation.	Material is properly supported in clamp or vice.	Chapter 22	
		Area below cutting line is clear for blade travel.	Chapter 22	
		Base of saw remains in full, flat contact with stock.	Chapter 22	
		Cut edge is 90° to face of panel.	Chapter 22	
		Dimension tolerance of $\pm 0.8$ mm (1/32") [0.0312"].	Chapter 22	
		Cut surfaces exhibit uniform saw marks without burn or defects.	Chapter 22	

2	Given material, set up equipment with the proper blade for material being cut, lay out stock, and perform operation.	Marks stock to specified dimension/pattern.	Chapter 22	
		Selects and installs proper blade.	Chapter 22	
		Bores starting hole to accept blade when interior/captured pattern is required.	Chapter 22	
		Meets Level 1 performance standard.		
<b>Operation—Plunge Cutting</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
2	Given material, set up equipment with the proper blade for material being cut, lay out stock, and perform operation.	Marks stock to specified dimension/pattern.	Chapter 22	
		Selects and installs proper blade.	Chapter 22	
		Material is properly supported in clamp or vice.	Chapter 22	
		Area below cutting line is clear for blade travel.	Chapter 22	
		Eases running blade into workpiece.	Chapter 22	
		Base of saw remains in full, flat contact with stock.	Chapter 22	
		Cut edge is 90° to face of panel.	Chapter 22	
		Dimension tolerance of $\pm 0.8$ mm (1/32") [0.0312"].	Chapter 22	
		Cut surfaces exhibit uniform saw marks without burn or defects.	Chapter 22	

## Sliding Table Saw

Pre-Operation Checklist				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1		Verifies position and condition of scoring blade.	Chapter 23	
2		Selects, properly installs, and aligns correct main and scoring blades.	Chapter 23	
		Installs and properly adjusts required jigs and fixtures.	Chapter 38	

## Table Saw

Pre-Operation Checklist				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1		Verifies tool is properly guarded and covered.	Chapter 23	
		Verifies saw setup using a test piece.	Chapter 23	
		Demonstrates knowledge of and proper use of all machine specific controls.	Chapter 23	
		Verifies splitter/riving knife is in place and aligned with blade.	Chapter 23	
		Verifies proper throat plate is installed and properly aligned with surface of table.	Chapter 23	

		Verifies dust collection operable/operating.	Chapter 23	
2		Selects and properly installs correct blade.	Chapter 23	
		Installs and properly adjusts blade guard.	Chapter 23	
		Installs and properly adjusts throat plate.	Chapter 23	
		Sets fence properly (dimension, parallel to blade, properly locked down).	Chapter 23	
		Installs and properly adjusts splitter/riving knife.	Chapter 23	
		Installs and properly adjusts required jigs and fixtures.	Chapter 23	
		Meets Level 1 performance standard.		
<b>Operation—Ripping</b>				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1	Given material with one straight edge and machine set up and ready to cut, rip material to a specified width (> 4" [100 mm]) using the fence.	Dimension tolerance is $\pm 0.4$ mm (1/64") [0.0156"] in width along entire length of material.	Chapter 23	Section Project 5-1
		Angle of cut is 90° to the face.	Chapter 23	Section Project 5-1
		Cut surfaces exhibit uniform saw marks with minimal burn marks.	Chapter 23	Section Project 5-1
		Cut is free of tearout.	Chapter 23	Section Project 5-1

2	Given material with one straight edge, set up machine, and rip material to a specified width (> 4" [100 mm]) using the fence.	Meets Level 1 performance standard.		
<b>Operation—Crosscutting</b>				
Level	Objective	Performance Standard	Textbook Chapter	Lab Workbook Material
1	Given material, with machine and necessary fixtures/jigs set up and ready to cut, crosscut both ends of the stock using a miter gauge or similar accessory perpendicular to the adjacent edge, to yield a specified length.	Angle of crosscut is 90° to the edge.	Chapter 23	
		Angle of cut is 90° to the face.	Chapter 23	
		Dimension tolerance for length is $\pm 0.4$ mm (1/64") [0.0156"].	Chapter 23	
		Cut surfaces exhibit uniform saw marks with minimal burn marks.	Chapter 23	
		Cut is free of tearout.	Chapter 23	
2	Given material and machine, set up to crosscut both ends of the stock using a miter gauge or similar accessory perpendicular to the adjacent edge, to yield a specified length.	Creates or installs a sacrificial fence for the operation.	Chapter 23	
		Meets Level 1 performance standard.		

<b>Operation—Groove/Plough with Dado Set</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given material and machine set up and ready to cut, groove/dado/plough material to specified dimensions.	Dimension tolerance is $\pm 0.4$ mm (1/64") [0.0156"] (both depth and width of cut along entire length).	Chapter 23	
		Cut is parallel to edge/end $\pm 0.4$ mm (1/64") [0.0156"].	Chapter 23	
		Sides of groove/dado/plough are 90° to the face of the material.	Chapter 23	
		Cut surfaces exhibit uniform saw marks with minimal burn marks.	Chapter 23	
		Cut is free of tearout.	Chapter 23	
2	Given material and specifications, set up machine and groove/dado/plough material to specified dimensions.	Meets Level 1 performance standard.		

<b>Operation—Mitering</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given material and machine set up, cut stock to specified length and miter angle.	Dimension tolerance of miter is $\pm 0.5^\circ$ from edge.	Chapter 23	Section Project 5-2
		Angle of cut is $90^\circ$ to the face.	Chapter 23	Section Project 5-2
		Dimension tolerance for length is $\pm 0.4$ mm ( $1/64''$ ) [ $0.0156''$ ].	Chapter 23	Section Project 5-2
		Cut surfaces exhibit uniform saw marks with minimal burn marks.	Chapter 23	Section Project 5-2
		Cut is free of tearout.	Chapter 23	Section Project 5-2
2	Given material and machine, set up machine, obtain and use mitering jig or fixture, cut stock to specified length and miter angle.	Meets Level 1 performance standard.		



<b>Operation—Beveling (45° angle)</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given material with one straight edge and machine set up and ready to cut, rip material to a specified width with a 45° bevel along the edge.	Dimension tolerance is $\pm 0.4$ mm (1/64") [0.0156"] in width along entire length of material.	Chapter 23	
		Angle of bevel is $45^\circ \pm 0.5^\circ$ to the face.	Chapter 23	
		Cut surfaces exhibit uniform saw marks with minimal burn marks.	Chapter 23	
		Cut is free of tearout.	Chapter 23	
2	Given material with one straight edge, set up machine, and rip material to a specified width with a 45° bevel along the edge.	Meets Level 1 performance standard.		

<b>Operation—Chamfering</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given material and machine set up and ready to cut, cut a chamfer to specifications.	Dimension tolerance is $\pm 0.4$ mm (1/64") [0.0156"] (dimension of chamfer along entire length of material).	Chapter 23	
		Angular tolerance: $\pm 0.5^\circ$ .	Chapter 23	
		Cut surfaces exhibit uniform saw marks with minimal burn marks.	Chapter 23	
		Cut is free of tearout.	Chapter 23	
2	Given material and machine, set up machine, select and install appropriate tooling, cut chamfer to specifications.	Meets Level 1 performance standard.		
<b>Operation—Tapering</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given material, taper jig, and machine set up and ready to cut, cut a taper to specifications.	Dimension tolerance is $\pm 0.8$ mm (1/32") [0.0312"].	Chapter 23	
		Cut surfaces exhibit uniform saw marks with minimal burn marks.	Chapter 23	
		Cut is free of tearout.	Chapter 23	

2	Given material and machine, fabricate a taper jig, cut a taper to specifications.	Cut part meets Level 1 performance standard.		
<b>Operation—Edge Rabbeting with a Dado Set</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
1	Given material and machine set up and ready to cut with sacrificial fence installed, cut an edge rabbet to specified dimensions.	Dimension tolerance is $\pm 0.4$ mm (1/64") [0.0156"] (both depth and width of rabbet along entire length).	Chapter 23	
		Inside corner of rabbet is 90°.	Chapter 23	
		Cut surfaces exhibit uniform saw marks with minimal burn marks.	Chapter 23	
		Cut is free of tearout.	Chapter 23	
2	Given material, set up machine, cut an edge rabbet along length of material to specified dimensions.	Creates or installs a sacrificial fence for the operation.	Chapter 23	
		Meets Level 1 performance standard.		

<b>Operation—Ripping Narrow Stock</b>				
<b>Level</b>	<b>Objective</b>	<b>Performance Standard</b>	<b>Textbook Chapter</b>	<b>Lab Workbook Material</b>
2	Given material with one straight edge, set up machine, install the correct blade, and rip material to a specified width ( $\leq 13$ mm [ $1/2$ "]) using the fence. Note: Splitter may be removed if necessary.	Uses push stick to push stock through the cut.	Chapter 23	
		Dimension tolerance is $\pm 0.4$ mm ( $1/64$ " [ $0.0156$ "]) in width along entire length of material.	Chapter 23	
		Angle of cut is $90^\circ$ to the face.	Chapter 23	
		Cut surfaces exhibit uniform saw marks with minimal burn marks.	Chapter 23	
		Cut is free of tearout.	Chapter 23	