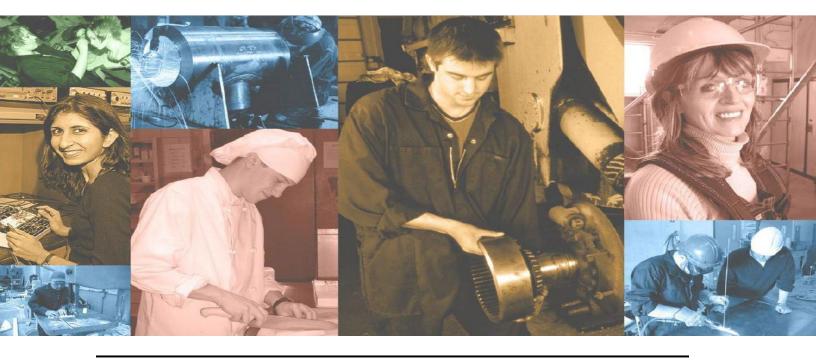
Pre-Employment Plan of Training Bricklayer





Government of Newfoundland and Labrador Department of Immigration, Population Growth and Skills Apprenticeship and Trades Certification Division

April 2016

PLAN OF TRAINING

Pre-Employment

Bricklayer

APRIL 2016



Government of Newfoundland and Labrador **Department of Advanced Education and Skills Apprenticeship and Trades Certification Division**

Approved by: 1 June 1

Chairperson, Provincial Apprenticeship and Certification Board

Date: April 14,2016

<u>Preface</u>

This curriculum standard is aligned with the 2015 Level 1 Atlantic Apprenticeship Curriculum Standard (AACS) and the 2011 edition of the National Occupational Analysis (NOA) for the Bricklayer trader. It describes the curriculum content for the Bricklayer Pre-employment training program.

Acknowledgements

The Provincial Trade Advisory Committee (PTAC), industry representatives, instructors and apprenticeship staff provided valuable input to the development of this provincial plan of training. Without their dedication to quality apprenticeship training, this document could not have been produced.

We offer a sincere thank you to the following members:

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Document Status	Date Approved	Mandatory Implementation Dates	Comments
Update	August 2015	September 2015 – Pre-employment	Based upon the 2015 AACS
	April 2016	September 2015 – Pre-employment	Pre-employment compliant with AACS Level 1
Update		September 2016 – Level 2	
		September 2017 – Level 3	
Update	March 2019	September 2019 – Pre-employment	Updated Related Suite courses

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A. NOA Comparison Chart

A National Occupational Analysis (NOA) comparison chart is located in the Atlantic Apprenticeship Curriculum Standard (AACS).

B. Program Structure

For each and every course, a formal assessment is required for which 70% is the pass mark. A mark of 70% must be attained in both the theory examination and the practical project assignment, where applicable as documented on an official transcript.

The order of course delivery within each level can be determined by the training institution, as long as pre-requisite conditions are satisfied.

Upon completion of a Pre-employment program, individuals may be required to complete other certifications (employer or job site specific) in order to gain employment.

A Pre-employment student who becomes an apprentice will also be required to complete Level 2 and 3 in the Atlantic Apprenticeship Curriculum Standard (AACS).

Pre-Employment						
Course No.	AACS No.	Course Name	Hours	Pre- Requisite(s)		
TS1510		Occupational Health & Safety	6	None		
TS1520	BRK-100	WHMIS	6	None		
TS1530		Standard First Aid	14	None		
TS1101	BRK-115 BRK-150	Shop Fundamentals	60	None		
BR1101	BRK-135 BRK-140	Laying Brick to The Line	160	BR1121 TS1101		
BR1110	BRK-145	Laying Block to the line	90	BR1121		
BR1121	BRK-120 BRK-125 BRK-130	Mortar	65	None		
BR1201		Veneer Walls	45	BR1101 BR1121		
BR2301		Chimneys	70	BR1101 BR1110 BR1121		
DR1112	BRK-160	Drawing and Sketching	30	None		
TS1300	BRK-105 BRK-110	Rigging	45	None		

Pre-Employment						
Course No.	AACS No.	Course Name	Hours	Pre- Requisite(s)		
BR1210	BRK-170 BRK-150	Load and Non-Load Bearing Walls and Columns	160	None		
BR1140	BRK-165	Building Envelope	12	None		
AM1000		Introduction to Essential Skills	9	None		
AP1102		Introduction to Apprenticeship	12	None		
AM1101		Math Essentials*	42	None		
AM1111		Bricklayer Math Fundamentals	42	AM1101		
MC1062		Computer Essentials	15	None		
CM2161	BRK-155	Communication Essentials	36	None		
SD1761		Workplace Essentials	24	None		
Total Pre-Employment Hours 943						

*A student who can meet the mathematics requirement through an ACUPLACER® test may be exempted from AM1101 - Math Essentials. Please check with your training institution.

Required Work Experience

Pre-Employment

TS1510 Occupational Health and Safety

Learning Outcomes:

- Demonstrate knowledge of interpreting the Occupational Health and Safety Act, laws and regulations.
- Demonstrate knowledge of understanding the designated responsibilities within the laws and regulations such as the right to refuse dangerous work; and the importance of reporting accidents.
- Demonstrate knowledge of how to prevent accidents and illnesses.
- Demonstrate knowledge of how to improve health and safety conditions in the workplace.

Duration: 6 Hours

Pre-Requisite(s): None

Objectives and Content:

i.

- 1. Interpret the Occupational Health and Safety Act laws and regulations.
 - explain the scope of the act
 - application of the act
 - Federal/Provincial jurisdictions
 - Canada Labour Code
 - rules and regulations
 - private home application
 - conformity of the Crown by the Act
- 2. Explain responsibilities under the Act and Regulations.
 - i. duties of employer, owner, contractors, sub-contractors, employees, and suppliers

- 3. Explain the purpose of joint health and safety committees.
 - i. formation of committee
 - ii. functions of committee
 - iii. legislated rights
 - iv. health and safety representation
 - v. reporting endangerment to health
 - vi. appropriate remedial action
 - vii. investigation of endangerment
 - viii. committee recommendation
 - ix. employer's responsibility in taking remedial action
- 4. Examine right to refuse dangerous work.
 - i. reasonable grounds for refusal
 - ii. reporting endangerment to health
 - iii. appropriate remedial action
 - iv. investigation of endangerment
 - v. committee recommendation
 - vi. employer's responsibility to take appropriate remedial action
 - vii. action taken when employee does not have reasonable grounds for refusing dangerous work
 - viii. employee's rights
 - ix. assigning another employee to perform duties
 - x. temporary reassignment of employee to perform other duties
 - xi. collective agreement influences
 - xii. wages and benefits
- 5. State examples of work situations where one might refuse work.
- 6. Describe discriminatory action.
 - i. definition
 - ii. filing a complaint procedure
 - iii. allocated period of time a complaint can be filed with the Commission
 - iv. duties of an arbitrator under the Labour Relations Act
 - v. order in writing inclusion
 - vi. report to commission Allocated period of time to request Arbitrator to deal with the matter of the request
 - vii. notice of application
 - viii. failure to comply with the terms of an order
 - ix. order filed in the court

- 7. Explain duties of commission officers.
 - i. powers and duties of officers
 - ii. procedure for examinations and inspections
 - iii. orders given by officers orally or in writing
 - iv. specifications of an order given by an officer to owner of the place of employment, employer, contractor, sub-contractor, employee, or supplier
 - v. service of an order
 - vi. prohibition of persons towards an officer in the exercise of his/her power or duties
 - vii. rescinding of an order
 - viii. posting a copy of the order
 - ix. illegal removal of an order
- 8. Interpret appeals of others.
 - i. allocated period of time for appeal of an order
 - ii. person who may appeal order
 - iii. action taken by Commission when person involved does not comply with the order
 - iv. enforcement of the order
 - v. notice of application
 - vi. rules of court
- 9. Explain the process for reporting of accidents.
 - i. application of act
 - ii. report procedure
 - iii. reporting notification of injury
 - iv. reporting accidental explosion or exposure
 - v. posting of act and regulations

- 1. Conduct an interview with someone in your occupation on two or more aspects of the act and report results.
- 2. Conduct a safety inspection of shop area.

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TS1520 Workplace Hazardous Materials Information System (WHMIS)

Learning Outcomes:

- Demonstrate knowledge of interpreting and applying the Workplace Hazardous Materials Information System (WHMIS) Regulation under the Occupational Health and Safety Act.

Duration: 6 Hours

Pre-Requisite(s): None

- 1. Define WHMIS safety.
 - i. rational and key elements
 - ii. history and development of WHMIS
 - iii. WHMIS legislation
 - iv. WHMIS implementation program
 - v. definitions of legal and technical terms
- 2. Examine hazard identification and ingredient disclosure.
 - i. prohibited, restricted and controlled products
 - ii. classification and the application of WHMIS information requirements
 - iii. responsibilities for classification
 - the supplier
 - the employer
 - the worker Classification: rules and criteria
 - information on classification
 - classes, divisions and subdivision in WHMIS
 - general rules for classification
 - class A compressed gases
 - class B flammable and combustible materials
 - class C oxidizing material
 - class D poisonous and infectious material
 - class E corrosive material
 - class F dangerously reactive material
 - iv. products excluded from the application of WHMIS legislation
 - consumer products
 - explosives
 - cosmetics, drugs, foods and devices
 - pest control products
 - radioactive prescribed substances
 - wood or products made of wood
 - manufactured articles

- tobacco or products of tobacco
- hazardous wastes
- products handled or transported pursuant to the Transportation of Dangerous Goods (TDG) Act
- v. comparison of classification systems WHMIS and TDG
- vi. general comparison of classification categories
- vii. detailed comparison of classified criteria
- 3. Explain labeling and other forms of warning.
 - i. definition of a WHMIS label
 - supplier label
 - workplace label
 - other means of identification
 - ii. responsibility for labels
 - supplier responsibility
 - employer responsibility
 - worker responsibility
 - iii. introduce label content, design and location
 - supplier labels
 - workplace labels
 - other means of identification
- 4. Introduce material safety data sheets (MSDS).
 - i. definition of a material safety data sheet
 - ii. purpose of the data sheet
 - iii. responsibility for the production and availability of data sheets
 - supplier responsibility
 - employer responsibility
 - workers responsibility

- 1. Locate WHMIS label and interpret the information displayed.
- 2. Locate a MSDS sheet for a product used in the workplace and determine what personal protective equipment and other precautions are required when handling this product.

TS1530 Standard First Aid

Learning Outcomes:

- Demonstrate knowledge of recognizing situations requiring emergency action.
- Demonstrate knowledge of making appropriate decisions concerning first aid.

Duration: 14 Hours

Pre-Requisite(s): None

Practical Requirements:

1. Complete a **St. John Ambulance or Canadian Red Cross** Standard First Aid Certificate course.

TS1101 Shop Fundamentals

Learning Outcomes:

- Demonstrate knowledge of safety regulations in the operation and maintenance of shop tools, equipment and facilities.

Duration: 60 Hours

Pre-Requisite(s): None

- 1. Describe the use of the different types of trade related measuring tools.
- 2. Describe safety requirements for using hand tools and fasteners.
- 3. Describe the different types of fasteners.
- 4. Explain oxidation, corrosion, tensile strength and shear strength.
- 5. Describe types of hydraulic and pneumatic lines and fittings and explain their applications.
- 6. Describe the types of fastener tools.
- 7. Describe the different types of power tools.
- 8. Describe the different types of hydraulic tools.
- 9. Describe safety requirements for using power tools.
- 10. Describe the parts of a twist drill.
- 11. Describe drill sizes and speed requirements.
- 12. Describe types of hoisting and lifting equipment such as forklifts, cranes, block and tackle, chain hoist and electric winch.
- 13. Explain the purpose of cutting power tools.
- 14. Describe types and explain applications of:
 - i. portable and stationary grinders
 - ii. grinding wheels
 - iii. grinding discs

- iv. grinder dressers
- v. rotary wire brushes
- vi. diamond cutting blades and cups
- 15. Describe types of compressors and components.
- 16. Describe the pliers (all types), screwdrivers (all types), wrenches (all types), clamps (all types) and vices (all types) used for fitting and assembling as per assigned information to within specifications required.
- 17. Describe as per the assigned information, rivets, keys, nuts, screws, pins, splines, studs, bolts, snap rings, bonds (thread locking compounds), washers, lock wires and self-locking nuts.

- 1. Use and maintain gripping and turning tools, measuring devices and levels.
 - i. use measuring tools (measuring tapes, rules, scale rules, calipers, micrometers, gauges, straight edges, plumb bobs, squares, and calculators) and levels
 - ii. use pliers, screwdrivers, wrenches, torque multipliers, hammers and mallets and other gripping and turning tools
 - iii. use scribers and markers
- 2. Use and maintain cutting tools.
 - i. identify, maintain and use punches, chisels, files and saws
 - ii. sharpen chisels and twist drills and drill bits
 - iii. shape and sharpen a cold chisel
 - iv. maintain and store cutting tools
 - v. cut sheet metal
 - vi. make bench projects
 - vii. cut bolts
 - viii. drill and ream holes
- 3. Install fasteners.
 - i. use and identify fasteners such as rivets, nails, wood screws, sheet metal screws, bolts, nuts, washers, masonry anchors and shields
 - ii. describe specific uses for each fastener
 - iii. recognize sizes of fasteners
 - iv. rivet and soft solder lap joint in galvanized sheet
 - v. identify bolt grades
 - vi. identify miscellaneous anchoring devices

- 4. Use power tools.
 - i. operate portable power tools
 - ii. operate power cleaning equipment
 - iii. operate hydraulic cutters and spreaders
- 5. Drill materials.
 - i. safely and effectively operate power drilling equipment (hammer and portable drill)
 - ii. select and use cutting fluids
 - iii. identify and select clamping devices
 - iv. maintain drilling equipment
- 6. Cut metals (power).
 - i. safely and effectively use power operated saws, friction cut-off equipment and shears
 - ii. maintain metal cutting power tools
 - iii. identify and use abrasives
- 7. Grind and finish metals.
 - i. install grinding wheel disc and brush
 - ii. adjust tool rest
 - iii. dress grinding wheel
 - iv. safely and effectively operate stationary and portable grinders
 - v. maintain equipment
- 8. Use explosive actuated tools.
 - i. select the proper tool for a specific use
 - ii. follow occupational health and safety regulations
 - iii. choose the correct shot and fastener for the job
 - iv. apply safety practices while using explosive actuated tools
 - v. fasten construction material to masonry and steel
 - vi. maintain and clean explosive actuated tools
- 9. Use and maintain compressed air system.
 - i. demonstrate safety precautions when using and maintaining compressors
 - ii. identify components of air controller (transformer)
 - iii. use and maintain air controller (transformer)
 - iv. use and maintain air and fluid hoses
- 10. Use and maintain shop equipment.
 - i. jacks
 - ii. chain hoists
 - iii. steam cleaner

BR1101 Laying Brick to the Line

Learning Outcomes:

- Demonstrate knowledge of laying brick with respect to various codes and regulations.
- Demonstrate knowledge of safety in potentially harmful situations.
- Demonstrate knowledge of conservation and environmental issues.

Duration: 160 Hours

Pre-Requisite(s): BR1121, TS1101

Objectives and Content:

- 1. Describe use of safety nets.
- 2. Describe electrical hazards on job locations.
- 3. Explain brick laying techniques.
- 4. Describe types of brick walls.

- 1. Lay brick to the line (Note: Brick walls should include stretcher bond and common bond).
 - i. use a chalk line
 - ii. establish horizontal coursing
 - iii. spread mortar for bed joints
 - iv. butter bricks
 - v. attach line blocks
 - vi. set trig brick
 - vii. lay masonry units to a line
 - viii. lay closure bricks
 - ix. plumb jambs
 - x. cut brick in half and to length
 - xi. joint brick
- 2. Build common type leads.
 - i. construct straight brick lead
 - ii. construct brick outside corner lead
 - iii. construct brick inside corner lead
 - iv. construct concrete block straight lead

- v. construct concrete block outside corner lead
- vi. construct concrete block inside corner lead
- 3. Use safety equipment and procedures.
 - i. wear appropriate clothing and equipment
 - clothing
 - boots and shoes
 - headgear
 - goggles and glasses
 - gloves
 - tuck hair under hard hat securely
 - ii. arrange materials safely in the work area
 - iii. use tools safely and maintain in good repair
 - iv. use ladders safely
 - v. remove nails from lumber
 - vi. avoid hazards of overhead falling objects
 - vii. suspend work in immediate area while materials are being moved by crane
 - viii. avoid hazards of protruding objects
 - ix. exercise care on scaffolding
 - x. lift objects safely
 - xi. avoid chemical burns
 - xii. keep work path, under-feet, clear
- 4. Build 100mm veneer panel walls in stretcher bond.
 - i. estimate materials
 - ii. establish and set up work area
 - iii. make a dry layout
 - iv. build specified leads
 - v. lay brick to a line
 - vi. allow for structural particulars such as chases, offsets pilasters and openings
 - vii. parge back of face wythe
 - viii. set steel lintels
 - ix. install flashing
 - x. lay soldier courses
 - xi. lay rowlock sills
 - xii. joint work to specifications

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BR1110 Laying Block to the Line

Learning Outcomes:

- Demonstrate knowledge of laying block with respect to various codes and regulations.
- Demonstrate knowledge of potentially harmful situations.
- Demonstrate knowledge of conservation and environmental issues.

Duration: 90 Hours

Pre-Requisite(s): BR1121

Objectives and Content:

- 1. Describe types of block walls.
- 2. Describe types of special leads.
- 3. Explain block laying techniques.

- 1. Lay block to the line.
 - i. establish horizontal coursing
 - ii. spread mortar for bed joints
 - iii. butter blocks
 - iv. lay concrete blocks to line
 - v. lay closure blocks
 - vi. cut concrete blocks
 - vii. cut hole in blocks
 - viii. finish joints as required
- 2. Build special type leads.
 - i. lay out leads
 - ii. construct block leads in various bonds
 - iii. construct block leads using a concrete block backup

BR1121 Mortar

Learning Outcomes:

- Demonstrate knowledge of mixing mortar with respect to various codes and regulations.
- Demonstrate knowledge of potentially harmful situations.
- Demonstrate knowledge of conservation and environmental issues.

Duration: 65 Hours

Pre-Requisite(s): None

Objectives and Content:

- 1. Describe types of mortar mixes.
- 2. Explain preparation techniques for mortar.

- 1. Prepare mortar.
 - i. select and identify mix materials
 - ii. select and determine ratios
 - iii. use hand mixing equipment
 - iv. use power mixing equipment
 - v. care for and maintain mixing equipment
 - vi. prepare mortar to specifications
 - vii. spread mortar

BR1201 Veneer Walls

Learning Outcomes:

- Demonstrate knowledge of veneer walls with respect to various codes and regulations.
- Demonstrate knowledge of potentially harmful situations.
- Demonstrate knowledge of conservation and environmental issues.

Duration: 45 Hours

Pre-Requisite(s): BR1101, BR1121

Objectives and Content:

- 1. Describe a veneer wall.
- 2. Explain construction techniques for veneer walls.

- 1. Build a veneer wall on a wooden frame with openings.
 - i. install flashings such as PVC, rigid, self-adhesive and rubber
 - ii. install vapour barrier
 - iii. layout
 - dry bonding
 - weep hole placement
 - vertical and horizontal tie locating
 - height spacing (gauging)
 - iv. install brick and stone
 - v. install lintels
 - vi. install veneer ties using anti-rust fasteners
 - vii. install decorative detailing as desired

- 2. Build extensions to masonry walls and brick up openings.
 - i. protect existing finished areas
 - ii. layout extension and align with existing wall
 - iii. tie by toothing, blocking or metal ties and anchors
 - iv. bond new wall, matching old masonry
 - v. joint finish and match old masonry
 - vi. remove, as necessary, frames, lintels, etc, before bricking up openings and shore as may be necessary
 - vii. brick up opening, matching existing finished areas as close as practicable
- 3. Cut openings and build frames in masonry.
 - i. protect existing finished areas
 - ii. cut openings and tooth
 - iii. salvage old units
 - iv. shore old masonry as required
 - v. check doors and window frames before installation for
 - alignment with wall
 - jambs being plumb
 - header being level
 - frame being square
 - spacers being present in centre frame
 - header reinforcement
 - anchors present (metal frame)
 - vi. install frames and lay masonry units to match existing finished areas

BR2301 Chimneys

Learning Outcomes:

- Demonstrate knowledge of building chimneys with respect to various codes and regulations.
- Demonstrate knowledge of potentially harmful situations.
- Demonstrate knowledge of conservation and environmental issues.

Duration: 70 Hours

Pre-Requisite(s): BR1101, BR1110, BR1121

Objectives and Content:

- 1. Explain the action of high temperature cement.
- 2. Describe types of chimney tops.
- 3. Describe types of chimneys.
- 4. Explain construction techniques.

Practical Requirements:

- 1. Construct chimneys with single flues.
 - i. set a clean-out
 - ii. cut chimney liner to receive a thimble
 - iii. cut clay and stainless steel chimney liners
 - iv. calculate offsets on flue linings
 - v. set a thimble
 - vi. cut flashing to fit pitch of roofs
 - vii. cut lines to construct chimney
 - viii. set clay and stainless steel liners in chimney
 - ix. install flue thimble in breastwork
 - x. install chimney flashing
 - xi. install flue thimble and clean-out door
 - xii. install chimney tops (brick and concrete)

Note: Single flue chimney construction should include the following:

- above thimble heights
- exposed above thimble heights
- exposed on gable end
- unexposed on slope roof

- unexposed on ridge of roof
- 2. Construct chimneys with multiple flues.
 - i. cut offset flue liners for multiple flue chimneys
 - ii. corbel brickwork
 - iii. set liners in multiple flue chimneys
 - iv. install chimney tops (brick and concrete)

Note: Chimney construction should include:

- multiple flue chimney containing clean-outs and thimbles
- multiple flue chimney topped out and flashed on a flat roof with a projected masonry cap
- multiple flue chimney containing offsets

BR1210 Load and Non-Load Bearing Walls and Columns

Learning Outcomes:

- Demonstrate knowledge of building load and non-load bearing walls with respect to various codes and regulations.
- Demonstrate knowledge of potentially harmful situations.
- Demonstrate knowledge of conservation and environmental issues.

Duration: 160 Hours

Pre-Requisite(s): None

- 1. Describe types of mortar.
- 2. Describe cavity wall system components such as membrane, insulation, ties.
- 3. Describe types of lintels.
- 4. Describe types and sizes of blocks.
- 5. Describe types of accessories.
- 6. Describe load and non-load points.
- 7. Describe horizontal and vertical coursing.
- 8. Describe foundation membrane and drainage systems.
- 9. Describe reinforcing systems.
- 10. Identify bonds and patterns.
- 11. Identify codes and regulations from N.B.C.
- 12. Identify ground conditions.

- 1. Builds cavity walls and structural walls.
 - i. build back-up wall
 - ii. brace and support walls
 - iii. lay units to the top of the line
 - iv. set lines
 - v. build leads
 - vi. stay on bond
- 2. Builds foundation walls.
 - i. brace and support walls
 - ii. lay units to the top of the line
 - iii. set lines
 - iv. build leads
 - v. stay on bond
- 3. Builds retaining walls.
 - i. corbel, batter and slope retaining walls
 - ii. install drainage systems
 - iii. install membranes
 - iv. lay units to design
 - v. Install reinforcement and tie backs
- 4. Installs reinforcing systems.
 - i. place reinforcing materials in specific location
 - ii. confine grout to cells
 - iii. prevent excessive mortar fins in interior
 - iv. place clean-outs
- 5. Builds columns and pilasters.
 - i. lay masonry units to bond
 - ii. align columns and pilasters
 - iii. set anchor plates and bolts

DR1112 Drawing and Sketching

Learning Outcomes:

- Demonstrate knowledge of reading drawings and sketching views.

Duration: 30 Hours

Pre-Requisite(s): None

- 1. Describe the alphabet of lines.
- 2. Identify the basic drawing symbols.
- 3. Explain what is meant by quality of lines.
- 4. Describe metric, mechanical, architectural and civil scales.
- 5. Identify the contents and purpose of mechanical, electrical, architectural and structural drawings.
- 6. Describe the different types of pencil lead grades.
- 7. Describe letter types.
- 8. Describe lettering instrument types.
- 9. Explain spacing, sizes and lettering techniques.
- 10. Describe different view orientations.
- 11. Describe obliques, isometrics and perspectives.
- 12. Explain sketching techniques.
- 13. Explain main view and possible views.
- 14. Describe the six principle views.
- 15. Explain association of surfaces.
- 16. Explain matching pictorials.

- 17. Describe types of dimensions and lines used.
- 18. Explain the rules of dimensioning.
- 19. Explain the various methods of producing lines.
- 20. Describe the purpose and types of sectional views.
- 21. Explain conventions associated with sectional views such as symbols, cutting plane lines, broken-out lines, etc.
- 22. Identify standard drawing symbols used on electrical, hydraulic and pneumatic drawings.
- 23. Identify colour codes used for electrical, hydraulic and pneumatic schematics.
- 24. Explain the purpose and methods of dimensioning.
- 25. Explain intersections and developments.
- 26. Explain graphs reticulation.

- 1. Construct geometric shapes and lines.
 - i. draw lines to scale
 - ii. scale lines
 - iii. divide lines into equal parts
 - iv. bisect lines
 - v. construct angles
 - vi. bisect angles
 - vii. construct concave and convex curves
 - viii. construct circles, arcs, tangents, ellipses, polygons, etc.
- 2. Sketch orthographic projections.
 - i. visualize object
 - ii. select views
 - iii. layout sketch
 - iv. sketch projection
 - v. dimension sketch
 - vi. make notations

- 3. Sketch sectional views.
 - i. locate section
 - ii. select type of view
 - iii. determine scale
 - iv. sketch view
 - v. dimension sketch
 - vi. make notations
- 4. Sketch primary auxiliary views.
 - i. visualize the view
 - ii. layout the sketch
 - iii. sketch view
 - iv. dimension sketch
 - v. make notations
- 5. Identify information from blueprints and drawings.
 - i. visualize views and projections
 - ii. identify information from schematic diagrams, assembly drawings, views, feeder maps, etcetera
 - iii. identify sequence of fabrication according to blueprint
 - iv. identify cut of materials from sketches
 - v. interpret horizontal, vertical, curved, inclined lines, fillets, and radii on working drawings
 - vi. identify dimensions of holes, cylinders, circles, angles and arcs
- 6. Identify information from bill of materials.

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TS1300 Rigging

Learning Outcomes:

- Demonstrate knowledge of installing safe rigging.

Duration: 45 Hours

Pre-Requisite(s): None

- 1. List the Occupational Health and Safety Regulations for rigging.
- 2. Describe the different types of ropes.
- 3. List the different kinds of knots.
- 4. Describe slings.
- 5. Describe the different types of scaffolds.
- 6. Describe the different types of ladders.
- 7. Describe methods of lead balancing.
- 8. Describe the safety factors to be considered when using swing staging.
- 9. Describe the proper procedures and equipment for handling heavy objects.
- 10. Describe power scaffolding.
- 11. Describe types and conditions of approved work platforms.
- 12. Specify the use of screw jacks versus hydraulic units.
- 13. Specify the use of elevators.
- 14. Explain how suspended scaffolding is erected and when and how it is used.
- 15. List safety rules for erecting and working on scaffolding (safety in structural components).
 - i. footboards
 - ii. putlogs
 - iii. braces

- iv. ties
- v. planking
- vi. scaffold brackets
- 16. Describe special problems of rolling and suspended scaffolding.

- 1. Use and maintain rigging equipment.
 - i. recognize and use hand signals
 - ii. recognize lifting capabilities
 - iii. recognize necessity for swing staging
 - iv. interpret occupational health and safety regulations
 - v. select and install ladders
 - vi. install scaffolds
 - vii. demonstrate the safe and proper use of lifting equipment such as come-alongs, chain falls, jacks, winches, overhead cranes, jacks, skids, cable tuggers, reeve blocks, slings and rope
 - viii. demonstrate proper use of knots
 - ix. use lifting attachments such as eye bolts and lifting lugs, beam clamps and crawlers, snatch blocks, spreader bars, shackles and screw jacks
 - x. transfer loads using lifting equipment
- 2. Use and maintain forklift.
 - i. safely and effectively use forklift
 - ii. use proper lifting procedures
 - iii. use hoisting signals
 - iv. use slings
- 3. Use scaffolding and rigging.
 - i. erect section of tubular steel sectional scaffold
 - ii. describe adjustable tower scaffolding and advantages
 - iii. inspect scaffolding before using
 - iv. direct/assist in loading/unloading masonry units from trucks
 - v. direct/assist hoisting masonry units to work stations

BR1140 Building Envelope

Learning Outcomes:

- Demonstrate knowledge of building envelope components, their purpose and application.
- Demonstrate knowledge of the procedures used to install building envelope components.

Duration: 12 Hours

Pre-Requisite(s): None

- 1. Define terminology associated with building envelope related to masonry applications.
- 2. Identify hazards and describe safe work practices related to building envelope related to masonry applications.
- 3. Interpret codes, regulations and manufacturers' specifications pertaining to building envelope related to masonry applications.
- 4. Identify tools and equipment related to building envelope related to masonry applications and describe their applications and procedures for use.
- 5. Identify components of building envelope related to masonry applications and describe their purpose and applications.
 - i. insulation
 - ii. membrane
 - iii. flashing
 - iv. parging
- 6. Identify types of insulation and describe their characteristics and applications.
- 7. Describe the procedures used to install insulation.
- 8. Identify types of membranes and describe their characteristics and applications.
- 9. Describe the procedures used to install membranes.
- 10. Identify types of flashing and describe their characteristics and applications.

- 11. Describe the procedures used to install flashing.
- 12. Identify types of parging and describe their characteristics and applications.
- 13. Describe the procedures used to apply parging.

- 1. Install / apply building envelope components.
 - i. membrane
 - ii. flashings
 - iii. insulation
 - iv. parging
- 2. Locate and extract information pertaining to the building envelope components from drawings and specifications

AM1000 Introduction to Essential Skills

Learning Outcomes:

- Demonstrate knowledge of the nine nationally recognized essential skills.
- Demonstrate knowledge of the essential skills levels of complexity.
- Demonstrate knowledge of the essential skills required for the learners chosen trade.
- Demonstrate an awareness of essential skills assessments.

Duration: 9 Hours

Pre-Requisite(s): None

- 1. Identify and describe the essential skills recognized by the Government of Canada through the Office of Literacy and Essential Skills (OLES).
 - i. reading
 - ii. document use
 - iii. numeracy
 - iv. writing
 - v. oral communication
 - vi. working with others
 - vii. thinking
 - viii. computer use
 - ix. continuous learning
- 2. Describe the Levels of Complexity measurement assigned to essential skills.
- 3. Identify the essential skills, along with their complexity level, identified as necessary for the learner's trade.
 - i. RSOS / NOA content¹
 - ii. OLES Essential Skills Profiles²
 - iii. OLES tools and support for apprentices and tradespersons³
- 4. Describe the nature and purpose of essential skills assessment.
 - i. self-assessment & formal assessment tools
 - ii. indicators of deficiencies
 - iii. suggestions for improvement

- 5. Describe the benefits of essential skills improvement.
 - i. confidence at work
 - ii. employability
 - iii. success in apprenticeship
 - iv. wage & job advancement

- Complete an essential skills self-assessment addressing numeracy, document use and reading. The online Government of Canada Essential Skills Indicator⁴ and Essential Skills self-assessment for the trades⁵ are to be used unless the instructor provides a similar assessment tool or tools.
- 2. Participate in a group discussion about the impact of gaps in essential skills that may be revealed by the self-assessments completed, and the value of improving essential skills.

*Students are graded complete or incomplete on this practical work, no grade is permitted for self-assessment performance. However, completion of the practical requirements is mandatory for completion of this unit.

Resources:

All footnotes are in the companion document "Resources for Introduction to Essential Skills" which is available online from Apprenticeship and Trade Certification.

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AP1102 Introduction to Apprenticeship

Learning Outcomes:

- Demonstrate knowledge of how to become a registered apprentice.
- Demonstrate knowledge of the steps to complete an apprenticeship program.
- Demonstrate knowledge of various stakeholders in the apprenticeship process.
- Demonstrate knowledge of the Red Seal Program.

Duration: 12 Hours

Pre-Requisite(s): None

Objectives and Content:

- 1. Define terminology associated with apprenticeship.
 - i. apprentice
 - ii. registered apprentice
 - iii. trade qualifier
 - iv. journeyperson
 - v. certified journeyperson
 - vi. Certificate of Apprenticeship
 - vii. Certificate of Qualification
 - viii. dual certification
 - ix. compulsory trades
- 2. Explain the roles and responsibilities of those involved in the apprenticeship system in Newfoundland and Labrador.
 - i. registered apprentice
 - ii. training institution
 - iii. employer
 - iv. journeyperson
 - v. mentor
 - vi. Department of Population Growth and Skills
 - Industrial Training section
 - Standards and Curriculum section
 - vii. Provincial Trade Advisory Committees (PTAC)
 - viii. Provincial Apprenticeship and Certification Board (PACB)

- 3. Describe the training components of an apprenticeship.
 - i. in-school

i.

- Pre-employment / Level 1
- advanced levels
- ii. workplace experience
- 4. Explain the steps in the registered apprenticeship process.
 - meet entrance requirements
 - education
 - employment
 - Recognition of Prior Learning (RPL) if applicable
 - ii. complete the registration process
 - application
 - required documents
 - iii. complete the Memorandum of Understanding (MOU)
 - contract responsibilities
 - probation period
 - cancellation
 - iv. maintain Record of Occupational Progress (Logbook)
 - sign off skills
 - record hours
 - update Apprenticeship Program Officer (APO) on progress
 - v. class calls
 - hour requirements
 - El eligibility
 - training schedule
 - vi. level examinations if applicable
 - vii. progression schedule
 - apprenticeship level
 - wage rates
 - certification examinations
 - Provincial
 - Interprovincial
 - written
 - practical if applicable
 - ix. certification

viii.

- Certificate of Apprenticeship
- Certificate of Qualification
- Provincial journeyperson Blue Seal
- Interprovincial journeyperson Red Seal endorsement (RSE)
- 5. Identify the Conditions Governing Apprenticeship.

- 6. Discuss cancellation of apprenticeship.
 - i. failure to notify of address change
 - ii. extended periods of unemployment
 - iii. lack of contact with an APO for an extended period
 - iv. failure to respond to class calls
 - v. declining of multiple class calls
- 7. Explain the Interprovincial Standards Red Seal program.
 - i. designated Red Seal trades
 - ii. the Red Seal Occupational Standard (RSOS)
 - iii. relationship of RSOS to IP examination
 - iv. national qualification recognition and mobility
- 8. Identify the current financial incentives available to apprentices.
 - i. Federal
 - ii. Provincial
- 9. Explain the Provincial / Territorial Apprentice Mobility Guidelines.
 - i. temporary mobility
 - ii. permanent mobility
- 10. Describe Atlantic and National Harmonization initiatives.

- 1. Use the Provincial Apprenticeship and Trades Certification website at www.gov.nl.ca/atcd.
 - i. locate, download, and complete the Application for Apprenticeship and Memorandum of Understanding (MOU)
 - ii. locate the address of the Industrial Training office closest to this campus
 - iii. locate the training schedule and identify the start date of the next class call for this trade
 - iv. locate and review the learning resources applicable to this trade
 - Study Guide
 - Exam Preparation Guide
 - Plan of Training

i.

- 2. Use the Plan of Training applicable to this trade.
 - locate the hours for the trade
 - total in-school
 - total required for certification
 - ii. locate the number of levels
 - iii. locate the courses in each level
 - iv. locate the hours required for progression to a Level 2 apprentice and the wage percentage of that level

AM1101 Math Essentials

Note: It is recommended that AM1101 be delivered in the first semester of the Preemployment program.

Learning Outcomes:

- Demonstrate knowledge of essential numeracy skills.
- Demonstrate knowledge of mathematics as a critical element of the trade environment.
- Demonstrate knowledge of mathematical principles in trade problem solving situations.
- Demonstrate the ability to solve simple mathematical word problems.

Duration: 42 Hours

Pre-Requisite(s): None

Objectives and Content:

Wherever possible, the instructor is expected to use trade specific examples to reinforce the course objectives.

- 1. Describe whole number operations.
 - i. read, write, count, round off, add, subtract, multiply and divide whole numbers.
- 2. Describe the application of the order of operations in math problems.
- 3. Describe fraction and mixed number operations.
 - i. read, write, add, subtract, multiply and divide fractions.
- 4. Describe decimal operations.i. read, write, round off, add, subtract, multiply and divide decimals.
- 5. Describe percent/decimal/fraction conversion and comparison.
 - i. convert between fractions, decimals and percents.
- 6. Identify percentage operations.
 - i. read and write percentages
 - ii. calculate base, rates and percentages
- 7. Identify ratio and proportion operations.
 - i. use a ratio comparing two quantities with the same units
 - ii. use a proportion comparing two ratios

- 8. Describe the use of the imperial measurement system in math problems.
 - i. identify units of measurement
 - length
 - mass
 - area
 - volume
 - capacity
- 9. Describe the use of the metric measurement system in math problems.
 - i. identify units of measurement
 - length
 - mass
 - area
 - volume
 - capacity
- 10. Identify angles, lines and geometric shapes.
 - i. use a protractor to measure angles
 - ii. determine whether an angle is right, acute or obtuse
 - iii. identify parallel, perpendicular, horizontal and vertical lines
 - iv. identify types of triangles, quadrilaterals, and 3-dimensional shapes
- 11. Describe estimation strategies.
 - i. estimate a linear measure using a referent
 - ii. estimate length, area and volume of objects in metric and imperial systems
- 12. Describe problem solving that involves linear measurement using instruments such as rulers or tape measures, in the metric and imperial systems.

1. To emphasize or further develop specific knowledge objectives, students will be required to complete practical demonstrations, which confirm proper application of mathematical theory to job skills.

AM1111 Bricklayer Math Fundamentals

Learning Outcomes:

- Demonstrate knowledge of mathematical concepts in the performance of trade practices.
- Demonstrate knowledge of mathematics as a critical element of the trade environment.
- Solve mathematical word problems.
- Demonstration knowledge of mathematical principles for the purposes of problem solving, job and materials estimation, measurement, calculation, system conversion, diagram interpretation and scale conversions, formulae calculations, and geometric applications.

Duration: 42 Hours

Pre-Requisite(s): AM1101

Objectives and Content:

The instructor is required to use trade specific examples to reinforce the course objectives.

- 1. Describe percent/decimal/fraction conversions and comparisons in trade specific situations.
- 2. Describe ratios and proportions as they relate to trade specific problems.
- 3. Describe the use of the Imperial and Metric measurement systems in trade specific applications.
- 4. Describe Imperial and Metric conversions in trade specific situations.
 - i. convert between imperial and metric measurements
 - ii. convert to another unit within the same measurement system
- 5. Describe how to manipulate formulas using cross multiplication, dividing throughout, elimination, and substitution to solve trade specific problems.
 i. right angle triangles
 - i. ngnt angle tha ii. area
 - ii. area iii. volume
 - iv. perimeter
 - v. density

- 6. Identify calculations involving geometry that are relevant to the trade.
 - i. angle calculations
 - ii. circle calculations
- 7. Identify math processes used to complete administrative trade tasks.
 - i. material estimation
 - ii. material costing
 - iii. time & labour estimates
 - iv. taxes & surcharges
 - v. markup & projecting revenue

- 1. To emphasize or further develop specific knowledge objectives, students will be asked to complete practical demonstrations, which confirm proper application of mathematical theory to job skills.
- **Note:** This course is **Non-Transferable** to other trades programs, and **Not Eligible for Prior Learning Assessment**. Students completing training in this trade program are required to complete this math course. Apprentice transfers under Provincial / Territorial Mobility agreements may be exempt from this requirement.

CM2161 Communication Essentials

Learning Outcomes:

- Demonstrate knowledge of the importance of well-developed writing and oral communication skills in the workplace.
- Demonstrate knowledge of the principles of effective workplace writing.
- Demonstrate knowledge of the purpose of various types of workplace documentation and workplace meetings.
- Demonstrate knowledge of the importance of effective interpersonal skills in the workplace.
- Demonstrate knowledge of effective job search techniques

Duration: 36 Hours

Pre-Requisite(s): None

Objectives and Content:

Wherever possible, the instructor is expected to use trade specific examples to reinforce the course objectives.

- 1. Define communications terminology used in the trade.
- 2. Identify the principles of effective workplace writing.
 - i. grammar, punctuation, mechanics
 - ii. sentence and paragraph construction
 - iii. tone, language, and word choice
 - iv. the writing process
 - planning
 - writing
 - editing/revising
- 3. Identify sources of information used to communicate in the workplace.
 - i. regulations
 - ii. codes
 - iii. OH&S requirements
 - iv. prints, drawings and specifications
 - v. company and client documentation
- 4. Identify types and purposes of informal workplace documents.
 - i. reports
 - incident
 - process
 - progress

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- ii. common trade specific forms
- primary and secondary methods of information gathering iii.
- accuracy and completeness in reports and forms iv.
- 5. Demonstrate an understanding of interpersonal communications in the workplace.
 - i. recognize group dynamics
 - contribute information and expertise ii.
 - individual learning styles iii.
 - audible
 - visual
 - experiential .
 - theoretical
 - recognize respectful and open communication iv.
 - accept and provide feedback ٧.
 - interpret non-verbal communication cues vi.
 - body language
 - signals .
- 6. Demonstrate an understanding of effective oral communication skills.
 - listening i.
 - receiving, understanding, remembering, reflecting, evaluating, paraphrasing, and responding
 - ii. speaking
 - using clear and proper words
 - tone, style, and vocabulary
 - brevity
 - common workplace oral communication situations iii.
 - introducing self and others
 - telephone conversations
 - tool box/safety talks
 - face-to-face conversations .
 - communicating with co-workers, supervisors, clients, and other trades people
- 7. Identify common practices related to workplace meetings.
 - meeting formats i.
 - ii. meeting preparation
 - agendas and minutes iii.
 - roles, responsibilities, and etiquette of meeting participants iv.

- 8. Identify acceptable workplace use of communication technologies.
 - cell / smart phone etiquette i.
 - ii. voice mail
 - iii. e-mail
 - texting / messaging through social media iv.
 - teleconferencing / videoconferencing for meetings and interviews ۷.
 - social networking vi.
 - vii. other emerging technologies
- 9. Demonstrate an understanding of effective job search techniques.
 - employment trends, opportunities, and sources of employment i.
 - job ads and the importance of fitting qualifications to job requirements ii. iii.
 - resumes
 - characteristics of effective resumes .
 - types of resumes
 - principles of resume formatting
 - effective cover letters iv.
 - job interview process ٧.
 - pre-interview preparation
 - interview conduct
 - post-interview follow up

- 1. Write a well-developed, coherent, unified paragraph.
- 2. Complete a trade-related form.
- 3. Prepare an agenda for a toolbox safety talk.
- 4. Participate in a simulated oral workplace communication situation.
- 5. Prepare a resume.

SD1761 Workplace Essentials

Note: It is recommended that SD1761 be delivered in the second half of Preemployment training.

Learning Outcomes:

- Demonstrate knowledge of workplace requirements in the areas of personal responsibility, unions, workers compensation, workers' rights, and human rights.
- Demonstrate knowledge of quality customer service.

Duration: 24 Hours

Pre-Requisite(s): None

Objectives and Content:

Wherever possible, the instructor is expected to use trade specific examples to reinforce the course objectives.

- 1. Identify personal responsibilities and attitudes that contribute to on-the-job success.
 - i. asking questions
 - ii. working safely
 - iii. accepting constructive feedback
 - iv. time management & punctuality
 - v. respect for authority
 - vi. stewardship of materials, tools and properties
- 2. Define unions and identify their role in the workplace.
 - i. purpose of unions
 - ii. common union structure
 - iii. unions in this trade
- 3. Demonstrate an understanding of the Worker's Compensation process.
 - i. aims, objectives, and benefits of the Workplace Health, Safety and Compensation Commission
 - ii. role of the workers advisor
 - iii. internal review process

- 4. Demonstrate an understanding of worker's rights.
 - i. labour standards
 - ii. regulations, including:
 - hours of work & overtime
 - termination of employment
 - minimum wages & allowable deductions
 - statutory holidays, vacation time, and vacation pay
- 5. Demonstrate an understanding of human rights issues.
 - i. awareness of the Human Rights Code and the role of the Human Rights Commission
 - ii. categories of discrimination and strategies for prevention
 - direct
 - systemic
 - adverse effect
 - iii. types of discrimination
 - race
 - ethnic origin
 - colour
 - religion
 - age
 - gender identify
 - sexual orientation
 - marital status
 - family status
 - disability
 - criminal conviction that has been pardoned
 - iv. conduct that constitutes harassment and discrimination
 - objectionable conduct
 - comments or displays made either on a one-time or continuous basis that demeans, belittles, or causes personal humiliation or embarrassment to the recipient
 - v. the value of diversity in the workplace
 - culture
 - gender identify
 - sexual orientation

- 6. Demonstrate an understanding of quality customer service.
 - i. importance of quality service
 - ii. barriers to quality service
 - physical and physiological
 - cultural
 - technological
 - iii. customer needs & common methods for meeting them
 - iv. characteristics & importance of a positive attitude
 - v. interactions with challenging customers
 - vi. addressing complaints and resolve conflict

None.

MC1062 Computer Essentials

Learning Outcomes:

- Demonstrate knowledge of desktop/laptop and mobile computers and their operation.
- Demonstrate knowledge of word processing and spreadsheet software, internet browsers and their applications.
- Demonstrate knowledge of e-mail applications and procedures.
- Demonstrate an awareness of security issues related to computers.
- Demonstrate an awareness of online learning using computers.

Duration: 15 Hours

Pre-Requisite(s): None

Objectives and Content:

When possible, the instructor is expected to use trade specific examples to reinforce the course objectives.

- 1. Identify computer types used in the workplace, and the characteristics of each.
 - i. desktop/laptop computers
 - ii. tablets
 - iii. smartphones
- 2. Identify common desktop and mobile operating systems.
 - i. Windows
 - ii. Mac OS
 - iii. iOS
 - iv. Android
- 3. Describe the use of Windows operating system software.
 - i. start and end a program
 - ii. use the help function
 - iii. use the find function
 - iv. maximize and minimize a window
 - v. open and scroll through multiple windows
 - vi. use the task bar
 - adjust desktop settings such as screen savers, screen resolution, and backgrounds
 - vii. shut down a computer

- 4. Identify the skills necessary to perform file management commands.
 - i. create folders
 - ii. copy files and folders
 - iii. move files and folders
 - iv. rename files and folders
 - v. delete files and folders
- 5. Describe the use of word processing software to create documents.
 - i. enter & edit text
 - ii. indent and tab text
 - iii. change text attributes
 - bold
 - underline
 - font
 - iv. change layout format
 - margins
 - alignment
 - line spacing
 - v. spell check and proofread
 - vi. save, close & reopen a document
 - vii. print document
- 6. Describe the use of spreadsheet software to create documents.
 - i. enter data in cells
 - ii. format data in cells
 - iii. create formulas to add, subtract, multiply and divide
 - iv. save, close & reopen a spreadsheet
 - v. print spreadsheet
- 7. Describe the use of the internet in the workplace.
 - i. web browsers
 - ii. search engines
 - iii. security issues
 - iv. personal responsibility for internet use at work
- 8. Describe the role of e-mail.
 - i. e-mail etiquette
 - grammar and punctuation
 - privacy issues when sharing and forwarding e-mail
 - work appropriate content
 - awareness of employer policies

- ii. managing e-mail
 - using folders
 - deleting, forwarding, replying
- iii. adding attachments to e-mail
- iv. view e-mail attachments
- v. printing e-mail
- 9. Describe computer use for online learning.
 - i. online training
 - ii. level exams
 - iii. study guides
 - iv. practice exams

- 1. Create, save and print a document using word processing software.
- 2. Create, save and print a document using spreadsheet software.
- 3. Send and receive an e-mail with an attachment.

C. Conditions Governing Apprenticeship Training

1.0 General

The following general conditions apply to all apprenticeship training programs approved by the Provincial Apprenticeship and Certification Board (PACB) in accordance with the **Apprenticeship Training and Certification Act (1999)**. If an occupation requires additional conditions, these will be noted in the specific Plan of Training for the occupation. In no case should there be a conflict between these conditions and the additional requirements specified in a certain Plan of Training. All references to Memorandum of Understanding will also apply to Letter of Understanding (LOU) agreements.

2.0 Entrance Requirements

2.1 Entry into the occupation as an apprentice requires:

Indenturing into the occupation by an employer who agrees to provide the appropriate training and work experiences as outlined in the Plan of Training.

- 2.2 Notwithstanding the above, each candidate must have successfully completed a high school program or equivalent, and in addition may be required to have completed certain academic subjects as specified in a particular Plan of Training. Mature students, at the discretion of the Director of Apprenticeship and Trades Certification, may be registered. A mature student is defined as one who has reached the age of 19 and who can demonstrate the ability and the interest to complete the requirements for certification.
- 2.3 At the discretion of the Director of Apprenticeship and Trades Certification, credit toward the apprenticeship program may be awarded to an apprentice for previous work experience and/or training as validated through prior learning assessment.
- 2.4 An Application for Apprenticeship form must be duly completed along with a Memorandum of Understanding as applicable to be indentured into an Apprenticeship. The Memorandum of Understanding must contain signatures of an authorized employer representative, the apprentice and an official representing the Provincial Apprenticeship and Certification Board to be valid.
- 2.5 A new Memorandum of Understanding must be completed for each change in an employer during the apprenticeship term.

3.0 **Probationary Period**

The probationary period for each Memorandum of Understanding will be six months or 900 employment credit hours. Within that period the memorandum may be terminated by either party upon giving the other party and the PACB one week notice in writing.

4.0 Termination of a Memorandum of Understanding

After the probationary period referred to in Section 3.0, the Memorandum of Understanding may be terminated by the PACB by mutual consent of the parties involved, or cancelled by the PACB for proper and sufficient cause in the opinion of the PACB, such as that stated in Section14.

5.0 Apprenticeship Progression Schedule, Wage Rates and Advanced Training Criteria

Progression Schedule

Brickla	ayer - 540	00 Hours		
Apprenticeship Level And Wages				
Level	Wage Rate	Requirements for Progression to Next Level	Next Level	
1 st	60%	 Completion of Pre-employment / Level 1 training Registration as an apprentice Pass Level 1 exam* Minimum 1800 hours of combined relevant work experience and training 	2 nd Year	
2 nd	75%	 Completion of AACS Level 2 training Pass Level 2 exam Minimum 3600 hours of combined relevant work experience and training 	3 rd Year	
3 rd	90%	 Completion of AACS Level 3 training Pass Level 3 exam Minimum 5400 hours of combined relevant work experience and training Sign-off of all workplace skills in apprentice logbook Pass certification exam 	Journeyperson Certification	
Wage	Rates	l	1	
		e percentages of the prevailing journeyperson's wage	rate in the place	

- Rates are percentages of the prevailing journeyperson's wage rate in the place of employment of the apprentice.
- Rates must not be less than the wage rate established by the Labour Standards Act (1990), as now in force or as hereafter amended, or by other order, as amended from time to time replacing the first mentioned order.
- Rates must not be less than the wage rate established by any collective agreement which may be in force at the apprentice's workplace.
- Employers are free to pay wage rates above the minimums specified.

Level Exams

• This program may **not** currently contain level exams, in which case this requirement will be waived until such time as level exams are available.

Class Calls (Afte	r Appropriate bin Desistration	
Class Calls (Alle	r Apprenticeship Registration)	T
Call Level	Requirements for Class Call	Hours awarded for In-School Training
Direct Entry Level 1	 Minimum of 1800 hours of relevant work experience Prior Learning Assessment (PLA) at designated college (if applicable) 	240
Level 2	 Minimum of 3600 hours of relevant work experience and training 	180
Level 3	 Minimum of 5400 hours of relevant work experience and training 	240

Class Calls at Minimum Hours

 Class calls may not always occur at the minimum hours indicated. Some variation is permitted to allow for the availability of training resources and apprentices.

6.0 Tools

Apprentices shall be required to obtain their own hand tools applicable for the designated occupation of registration or tools as specified by the PACB.

7.0 Periodic Examinations and Evaluation

- 7.1 Every apprentice shall submit to such occupational tests and examinations as the PACB shall direct. If after such occupational tests and examinations the apprentice is found to be making unsatisfactory progress, his/her apprenticeship level and rate of wage shall not be advanced as provided in Section 5 until his/her progress is satisfactory to the Director of Apprenticeship and Trades Certification and his/her date of completion shall be deferred accordingly. Persistent failure to pass required tests shall be a cause for revocation of his/her Memorandum of Understanding.
- 7.2 Upon receipt of reports of accelerated progress of the apprentice, the PACB may shorten the term of apprenticeship and advance the date of completion accordingly.
- 7.3 For each and every course, a formal assessment is required for which 70% is the pass mark. A mark of 70% must be attained in both the theory examination and the practical project assignment, where applicable as documented on an official transcript.

7.4 Course credits may be granted through the use of a PACB approved matrix which identifies course equivalencies between designated trades and between current and historical Plans of Training for the same trade.

8.0 Granting of Certificates of Apprenticeship

Upon the successful completion of apprenticeship, the PACB shall issue a Certificate of Apprenticeship.

9.0 Hours of Work

Any hours employed in the performance of duties related to the designated occupation will be credited towards the completion of the term of apprenticeship. Appropriate documentation of these hours must be provided.

10.0 Copies of the Registration for Apprenticeship

The Director of Apprenticeship and Trades Certification shall provide copies of the Registration for Apprenticeship form to all signatories to the document.

11.0 Ratio of Apprentices to Journeypersons

Under normal practice, the ratio of apprentices to journeypersons shall not exceed two apprentices to every one journeyperson employed. Other ratio arrangements would be determined and approved by the PACB.

12.0 Relationship to a Collective Bargaining Agreement

Where applicable in Section 5 of these conditions, Collective Agreements take precedence.

13.0 Amendments to a Plan of Apprenticeship Training

A Plan of Training may be amended at any time by the PACB.

14.0 Employment, Re-Employment and Training Requirements

- 14.1 The Plan of Training requires apprentices to regularly attend their place of employment.
- 14.2 The Plan of Training requires apprentices to attend training for that occupation as prescribed by the PACB.

- 14.3 Failure to comply with Sections 14.1 and/or 14.2 will result in cancellation of the Memorandum of Understanding. Apprentices may have their MOUs reinstated by the PACB but would be subject to a commitment to complete the entire program as outlined in the General Conditions of Apprenticeship. Permanent cancellation in the said occupation is the result of non-compliance.
- 14.4 Cancellation of the Memorandum of Understanding to challenge journeyperson examinations, if unsuccessful, would require an apprentice to serve a time penalty of two (2) years before reinstatement as an apprentice or qualifying to receive a class call to training as a registered Trade Qualifier. Cancellation must be mutually agreed upon by the employer and the apprentice.
- 14.5 An employer shall ensure that each apprentice is under the direct supervision of an approved journeyperson supervisor who is located at the same worksite as the apprentice, and that the apprentice is able to communicate with the journeyperson with respect to the task, activity or function that is being supervised.
- 14.6 Under the Plan of Training the employer is required to keep each apprentice employed as long as work is available, and if the apprentice is laid off due to lack of work, to give first opportunity to be hired before another is hired.
- 14.7 The employer will permit each apprentice to attend training programs as prescribed by the PACB.
- 14.8 Apprentices who cannot acquire all the workplace skills at their place of employment will have to be evaluated in a simulated work environment at a PACB authorized training institution and have sign-off done by instructors to meet the requirements for certification.

15.0 Appeals to Decisions Based on Conditions Governing Apprenticeship Training

Persons wishing to appeal any decisions based on the above conditions must do so in writing to the Minister of Immigration, Population Growth and Skills within 30 days of the decision.

- D. Requirements for Red Seal Endorsement
- 1. Evidence the required work experiences outlined in this Plan of Training have been obtained. This evidence must be in a format clearly outlining the experiences and must be signed by an appropriate person or persons attesting that these experiences have been obtained to the level required.
- 2. Successful completion of all required courses in the program.
- 3. A combination of training from an approved training program and suitable work experience totaling 5400 hours.

Or

A total of 8100 hours of suitable work experience.

4. Completion of a National Red Seal examination, to be set at a place and time determined by the Apprenticeship and Trades Certification Division.

E. Roles and Responsibilities of Stakeholders in the Apprenticeship Process

The apprenticeship process involves a number of stakeholders playing significant roles in the training of apprentices. This section outlines these roles and the responsibilities resulting from them.

The Apprentice:

- completes all required technical training courses as approved by the PACB.
- finds appropriate employment.
- completes all required work experiences in combination with the required hours.
- ensures work experiences are well documented.
- approaches apprenticeship training with an attitude and commitment that fosters the qualities necessary for a successful career as a qualified journeyperson.
- obtains the required hand tools as specified by the PACB for each period of training of the apprenticeship program.

The Employer:

- provides high quality work experiences in an environment conducive to learning.
- remunerates apprentices as set out in the Plan of Training or Collective Agreements.
- provides feedback to training institutions, Apprenticeship and Trades Certification Division and apprentices in an effort to establish a process of continuous quality improvement.
- where appropriate, releases apprentices for the purpose of returning to a training institution to complete the necessary technical courses.
- ensures work experiences of the apprentice are documented.
- ensures a certified journeyperson is currently on staff in the same trade area as the apprentice and whose certification is recognized by the NL Department of Population Growth and Skills.

The Training Institution:

- provides a high quality learning environment.
- provides the necessary student support services that will enhance an apprentice's ability to be successful.
- participates with other stakeholders in the continual updating of programs.

The Apprenticeship and Trades Certification Division:

- establishes and maintains program advisory committees under the direction of the PACB.
- promotes apprenticeship training as a viable career option to prospective apprentices and other appropriate persons involved, such as career guidance counsellors, teachers, parents, etc.
- establishes and maintains a protocol with training institutions, employers and other appropriate stakeholders to ensure the quality of apprenticeship training programs.
- ensures all apprentices are appropriately registered and records are maintained as required.
- schedules all necessary technical training periods for apprentices to complete requirements for certification.
- administers level, provincial and interprovincial examinations.

The Provincial Apprenticeship and Certification Board:

- sets policies to ensure the provisions of the **Apprenticeship and Certification Act (1999)** are implemented.
- ensures advisory and examination committees are established and maintained.
- accredits institutions to deliver apprenticeship training programs.
- designates occupations for apprenticeship training and/or certification.