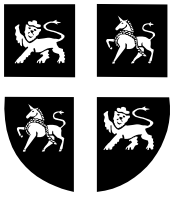

PROVINCIAL PLAN OF TRAINING

FOR THE

PAINTER AND DECORATOR

OCCUPATION

June 2003

Preface

This Provincial Plan of Training derived from the Atlantic Training Standard is based upon the 2000 edition of the National Occupational Analysis for the Painter and Decorator trade. It was developed through the cooperative efforts of the Atlantic Apprenticeship Council, which consists of both the Atlantic Directors of Apprenticeship and Apprenticeship Board Chairs. This document describes the curriculum content for the Painter and Decorator apprenticeship training program and outlines each of the courses necessary for completion of apprenticeship.

Acknowledgment

Advisory committees, industry representatives, instructors and apprenticeship staff provided valuable input into the development of this Provincial Plan of Training. Their dedication to quality apprenticeship will benefit institutional training for apprentices in this trade.

Apprenticeship Plan of Training Evaluation Form

Thank you for your interest in the development and revision of this Plan of Training. Upon review of this document, please record your feedback in relation to the following items:

- course division and organization
- relevancy of the content
- errors or omissions
- other suggestions for improvement and consideration

Overall comments are to be entered on this evaluation form and specific changes are to be entered directly on the document in the relevant area(s). When all feedback has been recorded, return this evaluation form along with the revised Plan of Training to the Apprenticeship Office noted at the bottom of the page.

(PLEASE PRINT)

Trade: Painter and Decorator

Full Name: _____

Type of Position: (Trade Practitioner, Instructor, etc.): _____

Company: _____

Address: _____

Telephone: _____

Comments: (Use a separate sheet of paper if necessary)

_____

_____

_____

_____

_____

_____

_____

Return Evaluation Form and Plan of Training to:

Manager, Industrial Training
Division of Institutional and Industrial Education
Department of Youth Services and Post-Secondary Education
P.O. Box 8700
St. John's, NF
A1B 4J6

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Program Outcomes

Upon completion of the Painter and Decorator Apprenticeship Program, apprentices will have the knowledge and skills required to perform the following tasks:

Task 1 Interprets occupation documentation.

Task 2 Uses and maintains equipment and tools.

Task 3 Assesses projects.

Task 4 Assesses quality of surface.

Task 5 Finishes drywalls.

Task 6 Treats surfaces.

Task 7 Selects finishing materials and methods.

Task 8 Applies paints.

Task 9 Selects wall covering materials and application methods.

Task 10 Applies wall coverings.

Task 11 Selects wood finishes and application methods.

Task 12 Prepares wood for finishing.

Task 13 Applies wood finishes.

Task 14 Assesses specialty finishes.

Task 15 Applies specialty finishes.

Program Structure

PAD = Painter and Decorator specific courses.

NF Course No.	Atlantic Course No.	Course Name	Suggested Hours	Prerequisites	Page No.
TS-1510		Occupational Health & Safety	6		12
TS-1530		First Aid	14		15
TS-1520		WHMIS	6		16
PL-1100	PAD-0100	Workplace Safety	30		19
PL-1110	PAD-0105	Blueprint Reading & Interpretation	45		22
PL-1120	PAD-1100	Tools and Equipment	45	PAD-0100	24
PL-1130	PAD-1105	Access Equipment	30	PAD-0100	26
PL-1140	PAD-1110	Surface Preparation 1 (Previously Coated Drywall)	30	PAD-1100	28
PL-1150	PAD-1115	Drywall Finishing	120	PAD-1100	30
PL-1160	PAD-1120	Surface Preparation 2 (Metal)	30	PAD-1100	32
PL-1170	PAD-1125	Surface Preparation 3 (Stucco)	15	PAD-1100	34
PL-1180	PAD-1130	Surface Preparation 4 (Masonry)	15	PAD-1100	36
PL-1190	PAD-1135	Surface Preparation 5 (Wood)	15	PAD-1100	38
PL-1200	PAD-1140	Surface Preparation 6 (Plaster/ Veneer Plaster)	15	PAD-1100	40
PL-1210	PAD-1145	Coatings	75	PAD-0100	42
PL-2100	PAD-1150	Painting 1 (Brush and Roller)	75	PAD-1100; PAD-1115; PAD-1120; PAD-1125; PAD-1130; PAD-1135; PAD-1140; PAD-1145	45
PL-2110	PAD-1155	Painting 2 (Spray Systems)	75	PAD-1100; PAD-1115; PAD-1120; PAD-1125; PAD-1130; PAD-1135; PAD-1140; PAD-1145	47
PL-1220	PAD-1160	Colour Theory and Mixing	30	PAD-0100	49
PL-2120	PAD-1165	Wood Finishing	60	PAD-1135; PAD1160	51
PL-2130	PAD-1170	Wallcovering	45	PAD-1110; PAD-1115; PAD-1140;	53

NF Course No.	Atlantic Course No.	Course Name	Suggested Hours	Prerequisites	Page No.
PL-2140	PAD-1175	Decorative and Specialty Finishes	60	PAD-1110; PAD-1115; PAD-1140; PAD-1160	55
CM-2150		Workplace Correspondence	45		58
MR-1220		Customer Service	30		60
SP-2330		Quality Assurance/Quality Control	30		62
MC-1050		Introduction to Computers	30		64
SD-1700		Workplace Skills	30		69
SD-1710		Job Search Techniques	15		71
SD-1720		Entrepreneurial Awareness	15		72

CONDITIONS GOVERNING APPRENTICESHIP TRAINING

1.0 GENERAL

The following general conditions will apply to all apprenticeship training programs approved by the Provincial Apprenticeship and Certification Board in accordance with the Apprenticeship Training and Certification Act. Where an occupation requires additional conditions, these will be noted in the specific plan of training for that occupation. In no case should there be a conflict between these conditions and the additional requirements specified in certain plans of training.

2.0 ENTRANCE REQUIREMENTS

2.1 Entry into the occupation as an apprentice requires:

The completion of designated first year courses specific to the occupation

OR

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

OR

Enrolment in a program of studies that includes all entry and advanced level skills and required work experiences as approved by the Provincial Apprenticeship and Certification Board.

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 particular plans of training. Mature students, at the discretion of the Director of Institutional and Industrial Education, 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 Institutional and Industrial Education, credit towards the apprenticeship program may be awarded to an apprentice for previous work experience and/or training as validated through prior learning assessment.

2.4 A Registration for Apprenticeship form must be duly completed.

3.0 PROBATIONARY PERIOD

The probationary period for each memorandum of understanding will be six months. Within that period the memorandum may be terminated by either party upon giving the other party and the Provincial Apprenticeship and Certification Board one week notice in writing.

4.0 TERMINATION OF A MEMORANDUM OF UNDERSTANDING

After the probationary period referred to in Section 3.0 herein, the memorandum of understanding may be terminated by the Board by mutual consent of the parties thereto or cancelled by the Board for proper and sufficient cause in the opinion of the Board.

5.0 APPRENTICESHIP PROGRESSION SCHEDULE AND WAGE RATES

5.1 Progression Schedule

7200 Hour Programs	**Requirements for Progression**	**Progress To**
First Year Apprentice	25% of Course Credit Hours, **Plus** relevant work experience totaling 1800 hours	Second Year
Second Year Apprentice	50% of Course Credit Hours, **Plus** relevant work experience totaling 3600 hours	Third Year
Third Year Apprentice	75% of Course Credit Hours**, Plus** relevant work experience totaling 5400 hours	Fourth Year
Fourth Year Apprentice	100% of Course Credit Hours, **Plus** completion and sign-off of workplace skills required for certification totaling 7200 hours	Write Certification Examination
5400 Hour Programs	**Requirements for Progression**	**Progress To**
First Year Apprentice	33% of Course Credit Hours, **Plus** relevant work experience totaling 1800 hours	Second Year
Second Year Apprentice	66% of Course Credit Hours, **Plus** relevant work experience totaling 3600 hours	Third Year
Third Year Apprentice	100% of Course Credit Hours, **Plus** completion and sign-off of workplace skills required for certification totaling 5400 hours	Write Certification Examination

4800 Hour Programs	Requirements for Progression	Progress To
First Year Apprentice	33% of Course Credit Hours, **Plus** relevant work experience totaling 1600 hours	Second Year
Second Year Apprentice	66% of Course Credit Hours, **Plus** relevant work experience totaling 3200 hours	Third Year
Third Year Apprentice	100% of Course Credit Hours, **Plus** completion and sign-off of workplace skills required for certification totaling 4800 hours	Write Certification Examination

5.2 For the duration of each Apprenticeship Training Period, the apprentice, who is not covered by a collective agreement, shall be paid a progressively increased schedule of wages which shall not be less than:

Program Duration	Wage Rates		Comments
7200 Hours	1st Year	55%	These wage rates are percentages of the prevailing journeyperson's wage rate in the place of employment of the apprentice. No apprentice shall be paid less than the wage rate established by the Labour Standards Act (1988), as now in force or as hereafter amended, or by other Order, as amended from time to time replacing the first mentioned Order.
	2nd Year	65%	
	3rd Year	75%	
	4th Year	90%	
5400 Hours and 4800 Hours	1st Year	55%	
	2nd Year	70%	
	3rd Year	85%	
4000 (Hairstylist) - The apprentice shall be paid no less than the minimum wage for hours worked and a commission agreed upon between the apprentice and the employer.			

6.0 TOOLS

Apprentices shall be required to obtain hand tools as and when specified by the Board.

7.0 PERIODIC EXAMINATIONS AND EVALUATION

7.1 Every apprentice shall submit to such occupational tests and examinations as the Board shall direct. If after such occupational tests and examinations the apprentice is found to be making unsatisfactory progress, his/her rate of wage

shall not be advanced as provided in Section 5 until his/her progress is satisfactory to the Director of Institutional and Industrial Education 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 Board 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. At the discretion of the instructor, the summative mark may be for completion of a theory examination or a combination of the theory examination and an assigned practical project.

8.0 GRANTING OF CERTIFICATES OF APPRENTICESHIP

Upon the successful completion of apprenticeship, the Board 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 Institutional and Industrial Education shall provide copies of the Registration for Apprenticeship form to all signatories to the document.

11.0 RATIO OF APPRENTICES TO JOURNEYPERSONS

The ratio of Apprentices to Journeypersons normally shall not exceed one apprentice to every one journeyperson employed. Exceptions for specific occupations may occur with the approval of the Provincial Apprenticeship and Certification Board.

12.0 RELATIONSHIP OF THE PLAN OF TRAINING TO A COLLECTIVE BARGAINING AGREEMENT

Collective agreements take precedence over the conditions outlined in the plan of training.

13.0 AMENDMENTS TO A PLAN OF APPRENTICESHIP TRAINING

A plan of training may be amended at any time by the Provincial Apprenticeship and Certification Board.

14.0 EMPLOYMENT, RE-EMPLOYMENT AND TRAINING REQUIREMENTS

14.1 The plan of training requires Apprentices to attend regularly their place of employment.

14.2 The plan of training requires Apprentices to regularly attend training programs for that occupation as prescribed by the Provincial Apprenticeship and Certification Board.

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 M.O.U.'s reinstated by the Provincial Apprenticeship and Certification Board 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 registering as a Trade Qualifier.

14.5 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 opportunity to be re-employed before another is hired.

14.6 The employer will permit each apprentice to attend regularly training programs as prescribed by the Provincial Apprenticeship and Certification Board.

14.7 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 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 Youth Services and Post-Secondary Education within 30 days of the decision.

REQUIREMENTS FOR RED SEAL CERTIFICATION

1. Evidence that the required work experiences outlined in this plan of training have been obtained. This evidence must be in a format that clearly outlines the experiences and must be signed by an appropriate person or persons attesting that these experiences have been obtained to the level required.

2. Normally, a combination of training from an accredited training program and suitable work experience totalling 7200 hours

   Or

   A total of 9000 hours of suitable work experience.

3. Completion of a National Red Seal examination, to be set at a place and time determined by the Industrial Training Division.

4. Payment of the appropriate examination fee.

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 captures, in a broad sense, these roles and the responsibilities that result from them.

The Apprentice

- to complete all required technical training courses as approved by the Provincial Apprenticeship and Certification Board.
- to find appropriate employment.
- to complete all required work experiences in combination with the required hours.
- to ensure that the work experiences are well documented.
- to approach apprenticeship training with an attitude and commitment that fosters the qualities necessary for a successful career as a qualified journeyperson.
- to obtain the required hand tools as specified by the Board for each period of training of the apprenticeship program.

The Employer

- to provide high quality work experiences in an environment that is conducive to learning.
- to remunerate apprentices as set out in this Plan of Training or Collective Agreements.
- to provide feedback to Training Institutions, Industrial Training Division and Apprentices in an effort to establish a process of continuous quality improvement.
- where appropriate, to release apprentices for the purpose of returning to a training institution to complete the necessary technical courses.
- to ensure that work experiences of the apprentices are documented.

The Training Institution

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

The Industrial Training Division

- to establish and maintain program advisory committees under the direction of the Provincial Apprenticeship and Certification Board.
- to promote apprenticeship training as a viable career option to prospective apprentices and other appropriate persons involved, such as career guidance counsellors, teachers, parents, etc.
- to establish and maintain a protocol with training institutions, employers and other appropriate stakeholders to ensure the quality of apprenticeship training programs.
- to ensure that all apprentices are appropriately registered and records are maintained as required.
- to schedule all necessary technical training periods for apprentices to complete requirements for certification.
- to administer provincial/interprovincial examinations.

The Provincial Apprenticeship and Certification Board

- to set policies to ensure that the provisions of the Apprenticeship Training and Certification Act are implemented.
- to ensure that advisory and examination committees are established and maintained.
- to accredit institutions to deliver apprenticeship training programs.

TS 1510 OCCUPATIONAL HEALTH AND SAFETY

Description:

This course is designed to give participants the knowledge and skills necessary to interpret the Occupational Health and Safety Act, laws and regulations; understand the designated responsibilities within the laws and regulations; the right to refuse dangerous work; and the importance of reporting accidents.

Course Outcomes:

Upon successful completion of this unit, the apprentice will be able to:
– prevent accidents and illnesses
– improve health and safety conditions in the workplace

Theory

1. Interpret the Occupational Health and Safety Act laws and regulations

    a. 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 & Regulations

    - Duties of employer, owner, contractors, sub-contractors, employees, and suppliers

3. Explain the purpose of joint health and safety committees

    - Formation of committee
    - Functions of committee
    - Legislated rights
    - Health and safety representation
    - Reporting endangerment to health
    - Appropriate remedial action
    - Investigation of endangerment
    - Committee recommendation
    - Employer's responsibility in taking remedial action

4. Examine right to refuse dangerous work

    - Reasonable grounds for refusal

- Reporting endangerment to health
- Appropriate remedial action
- Investigation of endangerment
- Committee recommendation
- Employer's responsibility to take appropriate remedial action
- Action taken when employee does not have reasonable grounds for refusing dangerous work
- Employee's rights
- Assigning another employee to perform duties
- Temporary reassignment of employee to perform other duties
- Collective agreement influences
- Wages and benefits

5. Describe discriminatory action

- Definition
- Filing a complaint procedure
- Allocated period of time a complaint can be filed with the Commission
- Duties of an arbitrator under the Industrial Relations Act
- Order in writing inclusion
- Report to commission Allocated period of time to request Arbitrator to deal with the matter of the request
- Notice of application
- Failure to comply with the terms of an order
- Order filed in the court

6. Explain duties of commission officers

- Powers and duties of officers
- Procedure for examinations and inspections
- Orders given by officers orally or in writing
- Specifications of an order given by an officer to owner of the place of employment, employer, contractor, sub-contractor, employee, or supplier
- Service of an order
- Prohibition of persons towards an officer in the exercise of his/her power or duties
- Rescinding of an order
- Posting a copy of the order
- Illegal removal of an order

7. Interpret appeals of others

- Allocated period of time for appeal of an order
- Person who may appeal order
- Action taken by Commission when person involved does not comply with the order
- Enforcement of the order

- Notice of application
- Rules of court

8. Explain the process for reporting of accidents

    - Application of act
    - Report procedure
    - Reporting notification of injury
    - Reporting accidental explosion or exposure
    - Posting of act and regulations

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Describe work situations that one might want to refuse.
2. Interview someone in your occupation on two or more aspects of the act and report results.

TS1530 First Aid

Description:

This course is designed to give the apprentice the ability to recognize situations requiring emergency action and to make appropriate decisions concerning first aid.

Complete a **St. John Ambulance** Standard First Aid Certificate course.

TS 1520 WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

Description:

This course is designed to give participants the knowledge and skills necessary to define WHMIS, examine hazard identification and ingredient disclosure, explain labeling and other forms of warning, and introduce material safety data sheets (MSDS).

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:

1. interpret and apply the Workplace Hazardous Materials Information System (WHMIS) Regulation under the Occupational Health & Safety Act.

Required Knowledge and Skills:

1. Define WHMIS safety

    - Rational and key elements
    - History and development of WHMIS
    - WHMIS legislation
    - WHMIS implementation program
    - Definitions of legal and technical terms

2. Examine hazard identification and ingredient disclosure

    - Prohibited, restricted and controlled products
    - Classification and the application of WHMIS information requirements
    - 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
    - Products excluded form 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
- Comparison of classification systems - WHMIS and TDG
- General comparison of classification categories
- Detailed comparison of classified criteria

3. Explain labeling and other forms of warning

- Definition of a WHMIS label
  - supplier label
  - workplace label
  - other means of identification
- Responsibility for labels
  - supplier responsibility
  - employer responsibility
  - worker responsibility
- Introduce label content, design and location
  - supplier labels
  - workplace labels
  - other means of identification

4. Introduce material safety data sheets (MSDS)

- Definition of a material safety data sheet
- Purpose of the data sheet
- Responsibility for the production and availability of data sheets
  - supplier responsibility
  - employer responsibility
  - workers responsibility

Practical

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

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.

SUGGESTED RESOURCES:

1. WHMIS Regulation
2. Sample MSDS sheets

PAD-0100 Workplace Safety

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis throughout the document.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- demonstrate knowledge of safety regulations.
- demonstrate knowledge of fire safety and equipment.
- demonstrate knowledge of hazardous workplace materials.

Theory:

1. Identify and explain fire safety regulations.

2. Describe classes of fire and associated fire fighting equipment.

3. Identify regulations relevant to the safe use of chemicals.

4. Describe the precautions that should be followed when handling or using caustic, toxic or flammable materials.

5. Describe the Occupational Health and Safety Act and Regulations as they apply to the trade.
   - employer and employee responsibilities
   - obstacles to health and safety
   - personal protective equipment
   - respiratory protective equipment including particle mask (organic vapor cartridge type) air supplied systems and air monitoring equipment.
   - safe movement of workers
   - safe use of ladders, scaffolds and rigging

6. Describe safety measures for locking out equipment.
   - lockout system
   - code of practice

7. Describe confined space working conditions and associated safety procedures.
   - definitions
     - confined space
     - physical agent
   - safety procedures
     - concentrations of chemical agents
     - oxygen content more than 23%
     - electrical equipment

- preventative measures
- duty of employer and employees
- emergency intervention
- work permit
- safety watch
- traffic control

8. Describe fall protection equipment and associated safety practices.
   - fall protection plan
   - control zone and safety monitors
   - lifelines and lanyards
   - safety harnesses
   - fall-arresting and shock absorbing devices
   - inspection and maintenance

9. Describe the safety measures related to electricity.

10. Describe procedures for adhering to manufacture's specifications and Material Safety Data Sheets (MSDS).

11. Describe the safety issues specific to the following environments.
    - residential
    - commercial
    - industrial

12. Describe, from the perspective of safety, the limitations of work carried out by the Painter and Decorator occupation and coordination with the work of other trades.

13. Describe medical monitoring practices when working with hazardous materials.
    - asbestos
    - lead
    - mold

14. Describe professional working practices.
    - documentation
    - communication
    - workplace behavior
    - appearance
    - care of tools and equipment
    - prevention of property damage
    - quality control

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Refer to MSDS sheets to determine safe handling procedures.
2. Locate exits, fire alarms and ventilation systems.

PAD- 0105 Blueprint Reading and Interpretation

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis task 1.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- locate and interpret information contained in blueprints, specifications and contract documents.
- use information contained on blueprints and in specifications to prepare material estimates.
- apply the appropriate national, provincial and municipal building codes.

Theory:

1. Describe the purpose and importance of contract documents and agreements.

2. Define terminology, abbreviations and symbols associated with blueprints.

3. Identify the types of drawings and describe their use in the trade.
   - architectural
   - structural
   - mechanical
   - plumbing
   - electrical
   - detail
   - section
   - site plan
   - floor plan
   - elevation

4. Describe the purposes and uses of sectional detail, symbols, specifications and schedules.

5. Identify and interpret the types of lines used on blueprints.

6. Explain the terms “scale” and “dimension”, their use and location on drawings.

7. Describe the purposes and uses of room finish schedules, opening schedules, and specifications.

8. Describe how to interpret detailed drawings for job application.

9. Describe the procedures used to perform calculations of area and material estimates.

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Locate and interpret information from specifications.
   - colour schemes
   - colour schedule
   - application techniques
   - special equipment, air circulation, heating, lighting, etc.
   - exterior finishes
2. Determine measurements from scaled drawings.
3. Prepare a material estimate.
4. Interpret architectural, structural and mechanical drawings.
   - floor plans
   - details
   - elevations
5. Identify and interpret information from drawings.
   - general building design
   - control joints
   - location of doors/windows, air intake/exhaust
   - number of floors complete with elevations
6. Identify finishing details from specifications.
   - built-in components
   - moldings and trim
   - surface treatments
7. Interpret information from field revisions and alterations.

PAD- 1100 Tools and Equipment

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis task 2.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- select, use and care for tools and equipment.

Theory:

1. Identify the types of hand tools and describe their applications and procedures for safe use and care.
    - brushes
        - construction and characteristics
        - care and cleaning
    - rollers
        - construction and characteristics
        - care and cleaning
    - brush and roller spinners
    - pot hooks
    - brush kits or holders
    - wet and dry film thickness gauges
    - caulking guns
    - scrapers
    - putty knives and broad knives
    - masking machines
    - chalk line
    - measuring and leveling tools
        - moisture meter
        - mil gauge
        - micrometer
    - cutting tools
    - smoothing tools
    - staple guns
    - mixing tools
    - straight edge
    - seam roller
    - paste table
    - protective equipment
        - drop clothes
        - masking tape
    - pails
    - sponges

- drywall finishing tools
- extension poles
- chemical sprayer

2. Identify the types of power tools and equipment and describe their applications and procedures for safe use and care.
   - abrasive blasting equipment
   - water blasting equipment
   - compressors
   - grinders
   - heat gun
   - paint agitators
   - drills
   - needle guns
   - sanders
   - roto-peen
   - spray equipment
   - vacuum cleaner

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Select the hand tool required to:
   - remove scaled paint
   - repair defects in unpainted or new surfaces
   - prepare surfaces for painting
   - remove wall coverings
   - repair defects in previously painted surfaces
2. Select the brush to apply specific coatings.
3. Select the roller to apply specific coatings to smooth or textured surfaces.
4. Demonstrate cleaning procedures for brushes and rollers.
5. List equipment requirements for applying coatings.
6. Remove items from walls in preparation for re-finishing (electrical plates, picture hangings, etc.)
7. Maintain a compressed air system.

PAD-1105 Access Equipment

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis task 2.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- demonstrate knowledge of the safe assembly and use of scaffolding and staging.
- demonstrate knowledge of ladders and their safe use.

Theory:

1. Describe methods of counter-balancing.

2. Identity the types of ladders and describe their components and applications.
   - extension
   - step
   - straight
   - trestle
   - stairwell

3. Describe safety factors to consider when using ladders.
   - tie off
   - overlaps
   - base to height ratio
   - minimum/maximum extension
   - electrical hazards
   - 3-point contact
   - fall prevention

4. Identify the types of scaffolds and describe their components and applications.
   - stationary scaffolds
   - rolling scaffolds
   - boatswain's chair
   - suspended scaffolds
     - swing
     - hanging
   - ladder jack
   - self-propelled platform

5. Describe the procedures used to safely erect, dismantle, maintain and inspect scaffolds.

6. Describe the procedures and equipment used for handling heavy objects.

7. Describe lifting hand signals and their associated meaning.

8. Identify common types of ropes, knots and slings and describe their applications and safe use.

9. Describe safe rigging practices.

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Install, inspect and maintain scaffolding.
   - recognize and use hand signals
   - recognize capacity
   - interpret occupational health and safety regulations
   - recognize necessity for swing staging
   - erect section of tubular steel sectional scaffold
   - erect adjustable tower scaffolding
2. Select, inspect and erect ladders.
3. Demonstrate the use of lifting equipment and their attachments.
4. Tie and inspect applicable knots.

PAD- 1110 Surface Preparation 1 (Previously Coated Drywall)

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis task 4, 6 and 7.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- demonstrate knowledge of the different types of drywall substrates and preparation methods for previously coated surfaces.
- demonstrate knowledge of the characteristics, categories and use of materials in previously coated surfaces.

Theory:

1. Define terminology associated with drywall resurfacing.

2. Identify drywall substrates and describe their characteristics.

3. Describe the methods and materials used to resurface drywall substrates.
   - previously painted surfaces
   - previously papered surfaces
   - textured surfaces

4. Describe the procedures used to remove wall coverings from drywall using:
   - steam
   - chemical strippers
   - hand tools

5. Describe procedures to inspect drywall substrates, their possible defects and probable causes.

6. Describe remedial measures for drywall substrate defects.
   - chemical
   - physical
   - sealing

7. Describe the characteristics, categories and safe use of materials in resurfacing drywall substrates.
   - abrasives
     - sandpaper
     - steel wool
   - chemicals
     - cleaning
     - neutralizing

    - stripping (wallpaper)
- sealers
    - aluminum paint
    - shellac
    - prepared stain blockers
- patching compounds
    - pre-mix
    - powders
    - putties

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Select and use the proper tools to repair defects and clean drywall surfaces.
2. Inspect existing surface prior to application of material.
    - assess product compatibility with existing coating.
3. Remove wall coverings from substrates using:
    - steam
    - chemical strippers
    - hand tools

PAD- 1115 Drywall Finishing

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis tasks 4 and 5.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- prepare drywall for finishing.

Theory:

1. Describe the effects of environmental conditions such as heat, humidity and poor lighting on surface preparation.

2. Identify the proper tools to tape and finish joints on drywall.

3. Identify the types of drywall tapes and describe their uses.

4. Describe the procedures used to apply corner beads.
   - metal
   - plastic
   - paper

5. Describe the procedures used to finish drywall.
   - embedding
   - rough coat
   - skim coat
   - pre-fill

6. Identify the types of joint filler mixtures and describe their characteristics, applications and procedures for use.
   - pre-mixed
   - powdered
   - quick set

7. Describe the different sanding techniques and their applications.

8. Describe the procedures used to inspect final drywall finish.
   - light

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Select and use the appropriate tools to finish drywall surfaces.
2. Inspect new surface prior to application of material.
3. Apply corner beads.
    - metal
    - plastic
    - paper
4. Apply joint filler, pre-mixed and powdered.
5. Check consistency of joint filler.
6. Use electric drill for mixing joint filler.
7. Tape flat and angle joints by hand.
    - use different types of tapes
    - prepare tapes for use
    - tape in sequence
    - coat angles in sequence
    - use technique to reduce amount of sanding needed
    - prepare butt joints
    - apply second and finish coats on flats
    - select sandpaper
    - perform sanding techniques
    - apply taping material
    - store joint filler
    - store taping material
    - perform touch ups

PAD- 1120 Surface Preparation 2 (Metal)

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis task 4, 6 and 7.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- demonstrate knowledge of the different types of metal substrates and preparation methods.
- demonstrate knowledge of the characteristics, categories and use of materials in metal surface preparation.
- demonstrate knowledge of the different types of mechanical treatments.

Theory:

1. Define terminology associated with metal surface preparation.

2. Identify metal substrates and describe their characteristics.

3. Describe the methods and materials used to prepare metal substrates.
    - previously painted surfaces
    - new surfaces

4. Describe procedures to inspect metal substrates.

5. Describe the characteristics, categories and safe use of materials in surface preparation.
    - abrasives
        - sandpaper
        - steel wool
        - blast media
    - chemicals
        - cleaning
        - etching
        - neutralizing
        - stripping
    - sealers
        - aluminum paint
        - shellac
        - prepared stain blockers
    - patching compounds
        - caulking
        - two-component
        - putties

6. Describe safe practices required when using mechanical treatment systems.
    - operator safety
    - public safety
    - regulations and standards
        - NACE
        - SSPC

7. Identify the various types of mechanical treatment systems and describe their components and associated equipment.
    - abrasive blasting
    - water blasting
    - power cleaning tools

8. Describe the set-up and procedures for use of mechanical treatment equipment.

9. Describe the procedures used to inspect final metal finish.

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Select and use the appropriate tools to prepare metal surfaces.
2. Inspect metal surface prior to application of material.
3. Inspect final metal finish.

PAD- 1125 Surface Preparation 3 (Stucco)

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis tasks 4, 6 and 7.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- demonstrate knowledge of the different types of stucco substrates and preparation methods.
- demonstrate knowledge of the characteristics, categories and use of materials in stucco surface preparation.

Theory:

1. Define terminology associated with stucco surface preparation.

2. Identify stucco substrates and describe their characteristics.

3. Describe the methods and materials used to prepare and apply interior and exterior insulated finish systems (EIFS) stucco substrates.
   - previously painted surfaces
   - new surfaces

4. Describe the procedures used to inspect stucco substrates, their possible defects and probable causes.

5. Describe remedial measures for stucco substrate defects.
   - chemical
   - physical
   - sealing

6. Describe the characteristics, categories and safe use of materials in surface preparation.
   - abrasives
     - sandpaper
     - steel wool
     - blast media
   - chemicals
     - cleaning
     - etching
     - neutralizing
   - sealers
     - aluminum paint
     - shellac

    - prepared stain blockers
- patching compounds
    - pre-mixed
    - powdered
    - putties
    - caulking

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Select and use the appropriate tools to prepare interior and exterior stucco surfaces.
2. Inspect surface prior to application of material.
3. Inspect final stucco finish.

PAD- 1130 Surface Preparation 4 (Masonry)

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis tasks 4, 6 and 7.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- demonstrate knowledge of the different types of masonry substrates and preparation methods.
- demonstrate knowledge of the characteristics, categories and use of materials in masonry surface preparation.

Theory:

1. Define terminology associated with masonry surface preparation.

2. Identify masonry substrates and describe their characteristics.

3. Describe the methods and materials used to prepare interior and exterior masonry substrates.
    - previously painted surfaces
    - previously papered surfaces
    - new surfaces

4. Describe the procedures used to inspect masonry substrates, their possible defects and probable causes.

5. Describe remedial measures for masonry substrate defects.
    - chemical
    - physical
    - sealing

6. Describe the characteristics, categories and safe use of materials in surface preparation.
    - abrasives
        - sandpaper
        - blast media
    - chemicals
        - cleaning
        - etching
        - neutralizing
    - sealers
        - aluminum paint
        - shellac

    - prepared stain blockers
- patching compounds
    - pre-mixed
    - powdered
    - putties
    - caulking

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Select and use the appropriate tools to prepare interior and exterior masonry surfaces.
2. Inspect surface prior to application of material.
3. Inspect final masonry finish.

PAD- 1135 Surface Preparation 5 (Wood)

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis tasks 4, 6, 7 and 11.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- demonstrate knowledge of the different types of wood substrates and preparation methods.
- demonstrate knowledge of the characteristics, categories and use of materials in wood surface preparation.

Theory:

1. Define terminology associated with wood surface preparation.

2. Identify wood substrates and describe their characteristics.

3. Describe the methods and materials used to prepare interior and exterior wood substrates.
   - previously painted surfaces
   - previously papered surface
   - new surfaces

4. Describe procedures to inspect wood substrates, their possible defects and probable causes.

5. Describe remedial measures for wood substrate defects.
   - chemical
   - physical
   - sealing

6. Describe the characteristics, categories and safe use of materials in surface preparation.
   - abrasives
     - powder
     - sandpaper
     - steel wool
     - blast media
     - chemical
   - chemicals
     - cleaning
     - neutralizing
     - bleaching

    - stripping
- sealers
    - aluminum paint
    - shellac
    - prepared stain blockers
- patching compounds
    - pre-mixed
    - powdered
    - putties
    - caulking

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Select and use the appropriate tools to prepare interior and exterior wood surfaces.
2. Inspect surface prior to application of material.
3. Inspect final wood finish.

PAD- 1140 Surface Preparation 6 (Plaster/Veneer Plaster)

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis tasks 4, 6 and 7.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- demonstrate knowledge of the different types of plaster substrates and preparation methods.
- demonstrate knowledge of the characteristics, categories and use of materials in plaster surface preparation.

Theory:

1. Define terminology associated with plaster and veneer plaster surface preparation.

2. Identify plaster and veneer plaster substrates and describe their characteristics.

3. Describe the methods and materials used to prepare plaster and veneer plaster substrates.
    - previously painted surfaces
    - previously papered surface
    - new surfaces

4. Describe procedures to inspect plaster and veneer plaster substrates, their possible defects and probable causes.

5. Describe remedial measures for plaster and veneer plaster substrate defects.
    - chemical
    - physical
    - sealing

6. Describe the characteristics, categories and safe use of materials in surface preparation.
    - abrasives
        - sandpaper
        - steel wool
    - chemicals
        - cleaning
        - neutralizing
    - sealers
        - aluminum paint
        - shellac
        - prepared stain blockers

- patching compounds
    - pre-mixed
    - powdered
    - putties
    - caulking

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Select and use the appropriate tools to prepare plaster and veneer plaster surfaces.
2. Inspect surface prior to application of material.
3. Inspect final plaster and veneer plaster finish.

PAD- 1145 Coatings

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis task 7.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:

- demonstrate knowledge of the different types of coatings, their applications and safe use.

Theory:

1. Define terminology associated with coatings.

2. Describe practices appropriate to personal and environmental protection.

3. Identify the types of conventional coatings and describe their ingredients, characteristics, applications and safe use.
    - resins
    - latex
    - acrylics
    - alkyds
    - oils
    - lacquer base
    - urethane
    - varnish
    - acoustical
    - epoxies
    - spirits
    - elastomerics
    - water-borne coatings
    - emulsions
    - pigments
        - color
        - white
        - extenders
        - priming
        - metallic
    - binders
        - natural (shellac, oils, etc.)
        - synthetics
    - thinners
        - natural
        - petroleum distillates

- catalysts (curing agents)
- driers (Cobalt, Japan, manganese, etc.)
- additives

4. Identify the types of industrial coatings and describe their ingredients, characteristics, application and use.
   - non-metallic
     - water-borne
     - alkyds
     - thermoplastic
     - thermoset
   - metallic
     - zinc-rich
     - aluminum
     - red lead
     - galvanizing

5. Identify the types of special purpose coatings and describe their ingredients, characteristics, applications and safe use.
   - urethane
   - seamless flooring
   - fire retardant
   - fire proofing
   - heat cured powder
   - texture
   - tank lining systems
   - high performance architectural
   - metalizing (thermal spray powder and wire)
   - galvanizing
   - barrier coat

6. Describe the application procedures and equipment used for fibreglass reinforcing plastic.
   - safety
   - surface preparation

7. Describe fire proofing industrial coatings and methods of application.
   - safety
   - surface preparation

8. Describe the procedures and conditions for mixing materials, including:
   - viscosity and its effect on application
   - temperature's effect on viscosity
   - solvent's effect on viscosity
   - plural components
   - effect of agitation
   - coating/solvent ratios

- thixotropic and rheology control agents

9. Describe the causes and remedies of coating failure.

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

PAD- 1150 Painting 1 (Brush and Roller)

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis tasks 2, 3, 6, 7 and 8.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- select and use the proper brush, roller and associated equipment.
- use various techniques to paint a variety of surfaces.
- clean and store materials and equipment after use.

Theory:

1. Define terminology associated with painting.

2. Identify the required materials and describe the procedures used to prepare an area for painting.

3. Describe the use of paint additives and their effects.

4. Describe testing procedures to assess product compatibility with existing coating and solvents.

5. Describe the use of prime coats, undercoats, and finish coats and their importance to the finished product.

6. Describe the process involved in applying prime coats, undercoats and finish coats to a variety of substrates.

7. Describe the environmental conditions that will affect the quality of the finished product.

8. Describe the criteria for selecting paint brushes and rollers.
   - coating
   - substrate
   - desired finish

9. Describe the procedures used to determine and adjust viscosity of paints.

10. Describe the techniques used to apply paints using a brush.
    - cutting in
    - feathering out
    - laying off
    - brushing defects

- stripe coating

11. Describe the techniques used to apply paints using a brush to:
    - windows
    - doors
    - walls
    - ceilings

12. Describe the techniques used to apply paints using a roller.

13. Describe the procedures used to condition, clean and store brushes and rollers.

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Determine the best application method based on the specifics of the job.
2. Protect surfaces not to be coated.
3. Test existing coating to determine product compatibility.
4. Select coating for application to a variety of substrates.
5. Select proper brush, noting:
    - brush size
    - bristle types
    - handle types
    - styles
    - coating
6. Select proper roller, noting:
    - pile depth
    - sleeve size
    - sleeve type
    - handles
    - tray
    - coating
7. Determine coatings viscosity and adjust as required.
8. Apply coating to a variety of substrates using brushing and rolling techniques.
9. Store coatings and solvents.
10. Clean and maintain tools and equipment.

PAD- 1155 Painting 2 (Spray Systems)

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis tasks 2, 3, 6, 7 and 8.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- select and use the appropriate spray painting equipment.
- use spray painting techniques to paint a variety of surfaces.
- clean and store materials and equipment after use.

Theory:

1. Define terminology associated with spray painting systems.

2. Describe practices appropriate to personal and environmental protection.

3. Identify the types of spray painting systems and describe their components, applications and procedures for safe use.
   - conventional
   - airless
   - electrostatic
   - high volume low pressure (HVLP) spray equipment
   - thermal spray powder and wire (metalizing)
   - plural spray
   - thermoplastic flame spray
   - hot spray

4. Identify the required materials and describe the procedures used to prepare an area for spray painting.

5. Describe the treatment of coatings for use in spray painting systems.
   - viscosity testing and thinning
   - mixing
   - straining

6. Describe testing procedures to assess product compatibility with existing coating and solvents.

7. Describe the use of prime coats, undercoats, barrier/intermediate coats and finish coats and their importance to the finished product.
8. Describe the process involved in applying prime coats, undercoats, barrier/intermediate coats and finish coats to a variety of substrates.
9. Describe the techniques used to apply stripe coats.

10. Describe the environmental conditions that will affect the quality of the finished product.

11. Describe the setup and operation of spray systems.

12. Describe the different techniques used in spraying various kinds of regular and irregular surfaces.

13. Describe the procedures used to determine and adjust viscosity of coatings for spray systems.

14. Describe the procedures used to clean and store spray equipment.

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Protect surfaces not to be coated.
2. Test existing coating to determine product compatibility.
3. Select coating for application to a variety of substrates.
4. Determine coating viscosity and adjust as required.
5. Setup and adjust spray paint equipment.
6. Apply paint to a variety of substrates using spray paint equipment.
7. Clean worksite, clean, store and maintain tools and equipment.
8. Store coatings and solvents.

PAD- 1160 Colour Theory and Mixing

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis task 3.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- demonstrate knowledge of colour theory and perception.
- demonstrate knowledge of colour mixing.

Theory:

1. Define terminology associated with colour and light.

2. Describe the source of colour.

3. Describe the effect of light on colour.
   - visual spectrum
   - subtractive chart
   - colours of the spectrum

4. Describe the relationship between the additive and subtractive theory of light.

5. Describe the colour wheel.
   - primary, secondary, tertiary, and intermediate colours
   - colour schemes

6. Describe what additive colours will make secondaries / mixes.

7. Describe the use of colour in the trade.
   - decoration
   - safety

8. Identity the tools and equipment used in mixing and matching paints and describe their applications and procedures for use.

9. Describe the procedures used to mix and match colours.
   - types of colouring agents
   - conditions for accurate results
   - tints, shades and tones of a specified colour

10. Describe the procedures used to calculate amounts and ratios.

11. Describe the properties of universal pigments and dyes.

- light fastness
- alkali and acid resistance properties
- tinting strength

12. Describe the use of the manufacture's data sheets.

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Draw and explain the additive chart of light.
2. Layout with pencil and compass:
   - a saturation chart
   - a color wheel
3. Mix and match paint colours to wet and dry samples.
4. Mix specified colours using colourants.

PAD- 1165 Wood Finishing

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis tasks 11, 12 and 13.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- identify various wood products and their composition.
- prepare wood surfaces for finish product application.
- apply finish products to various types of wood surfaces.

Theory:

1. Define terminology associated with wood and wood finishing.

2. Describe the various wood types and their open and closed grains.
   - hardwood
   - softwood
   - engineered wood products

3 Describe the procedures used to determine moisture content and define acceptable levels.

4. Describe the different types of grain patterns found in wood and veneers.

5. Describe the procedures used to assess wood condition.

6. Identify the various wood finishes and describe their characteristics and applications.

7. Identify wood finishing materials and describe their purpose, safe use and procedures for application.
   - bleach
   - wood filler
   - wood stain
   - wood sealer
   - varnish
   - lacquer
   - wax and oil finish
   - shellac
   - rubbing compounds
   - patching materials

8. Describe the procedures used to do touch-up and removal of old finishes.

9. Describe common finishing problems, probable causes and corrective action.

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Demonstrate recognition of hard and soft woods by:
   - grain pattern
   - colour
   - open and close grained wood
2. Assess condition and moisture level of woods.
3. Apply:
   - bleach
   - wash coats
   - oil and water stains
   - wood fillers
   - patching compounds
   - sealers
   - top coats
   - wax finishes
   - oil finishes
4. Select and use rubbing compounds.
   - synthetic minerals
   - pumice stone
   - rotten stone
   - steel wool
5. Clean, store and maintain tools and equipment.

PAD- 1170 Wallcovering

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis tasks 9 and 10.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- prepare walls to accept wallcoverings.
- select and apply the proper type of wallcovering for specific applications.
- install specialty wallcoverings.
- estimate the amount of materials required to complete a job.

Theory:

1. Define terminology associated with wallcoverings.

2. Describe the procedure used to remove old wallcovering and their adhesives.

3. Describe the procedures used to apply base coats.

4. Identify the types of wallcovering materials and describe their characteristics, dimensions and applications.
   - wallpaper
   - vinyl
   - fabric
   - foil
   - cork
   - carpet
   - wood veneer
   - exotic
   - border
   - murals

5. Identify the types of pastes and adhesives and describe their characteristics and recommended uses.

6. Describe the procedures used to apply adhesives.

7. Describe the necessary environmental conditions associated with wall coverings.

8. Describe the procedures used to prepare materials estimates.

9. Identify the types of wallcovering patterns and describe the effect that patterns play in material requirements.

10. Identify the tools and equipment required to install wallcoverings and describe their applications and use.

11. Describe the procedures used to install wallcoverings.

12. Describe the types of seams used in wallcoverings.
    - butt
    - lap
    - wire-edge

13. Describe the procedures used to apply wallcoverings to complex shapes.
    - sloped walls
    - circular walls
    - columns
    - ovals
    - stairwells
    - feature walls
    - complete rooms
    - ceilings

14. Describe the procedures used to maintain wallcoverings.
    - clean
    - removal of blemishes
        - grease and ink spots
        - bleeding dyes
        - pencil marks

15. Describe the procedures used to clean and store tools and equipment.

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Prepare surfaces for wallcoverings.
2. Assess environmental conditions.
3. Select and apply appropriate base coat.
4. Apply wallcovering.
5. Clean work area.

PAD- 1175 Decorative and Specialty Finishes

NOA Reference:

The material covered satisfies in whole or in part, the requirements of National Occupational Analysis tasks 14 and 15.

Course Outcomes:

Upon successful completion of this course, the apprentice will be able to:
- prepare various surfaces for decorative and specialty finishes.
- select and apply decorative and specialty finishes.
- estimate the amount of materials required to complete a job.

Theory:

1. Define terminology associated with decorative and specialty finishes.

2. Describe the limitations and appropriate use of decorative finishes.

3. Identify common types of decorative finishes and describe their purpose, required materials and application procedures.
   - antique glazing
   - antique highlighting
   - spatter finish
   - multicolour spraying
   - stippling
   - mottling
   - woodgraining
   - marbleizing
   - stenciling and pouncing
   - graphics
   - gilding
   - texture paints
   - striping and lining
   - wall washing

4. Identify the tools used to obtain special decorative finishes and describe their applications and use.

5. Describe the use of textured finishes.
   - characteristics
   - procedures
   - use of abrasives
   - consistency

6. Describe the effects of environmental conditions on decorative and specialty finishes.

7. Describe the bro-kade wall finish process.

8. Describe the procedures used to estimate materials.

9. Describe the procedures used to clean and maintain tools and equipment.

Practical:

Practical skills enhance the apprentices' ability to meet the objectives of this course. The learning objectives outlined below are **mandatory** in Newfoundland, but are provided as suggestions for Nova Scotia, Prince Edward Island and New Brunswick.

1. Select the tools and material required to achieve the selected decorative finish.
2. Prepare a surface for decorative finishes.
3. Apply a variety of decorative finishes to prepared surfaces.
4. Clean and store tools used in decorative finishes.

REQUIRED RELATED COURSES

CM 2150 WORKPLACE CORRESPONDENCE

Description:

This course is designed to give students the opportunity to study the principles of effective writing. Applications include letters, memos, and short report writing.

Course Outcomes:

Upon completion of the course, students will be able to:
- understand the importance of well-developed writing skills in business and in career development.
- understand the purpose of the various types of business correspondence.
- examine the principles of effective business writing.
- examine the standard formats for letters and memos.
- writing effective letters and memos.
- examine the fundamentals of informal reports and the report writing procedure.
- produce and informal report

Required Knowledge and Skills:

1.0 Review of Sentences and Paragraph Construction

- 1.1.1 Define a sentence and review the four types.
- 1.1.2 Identify the essential parts of a sentence, particularly subject and predicate, direct and indirect object.
- 1.1.3 Differentiate among phrases, clauses, and sentences.
- 1.1.4 Explore the major concepts related to subject-verb agreement.
- 1.1.5 Apply rules and principles for writing clear, concise, complete sentences which adhere to the conventions of grammar, punctuation, and mechanics.

1.2 Examine and Apply Principles of Paragraph Construction

- 1.2.1 Discuss the basic purposes for writing.
- 1.2.2 Define a paragraph and describe the major characteristics of an effective paragraph.
- 1.2.3 Write well-developed, coherent, unified paragraphs which illustrate the following: A variety of sentence arrangements; conciseness and clarity; and adherence to correct and appropriate sentence structure, grammar, punctuation, and mechanics.

2.0 Business Correspondence

2.1 Examine the Value of Business Writing Skills

- 2.1.1 Discuss the importance of effective writing skills in business

2.1.2 Discuss the value of well-developed writing skills to career success

2.2 Examine Principles of Effective Business Writing

2.2.1 Discuss the rationale and techniques for fostering goodwill in business communication, regardless of the circumstances
2.2.2 Review the importance of revising and proofreading writing

2.3 Examine Business Letters and Memos

2.3.1 Differentiate between letter and memo applications in the workplace
2.3.2 Identify the parts of a business letter and memo
2.3.3 Explore the standard formats for business letters and memos
2.3.4 Examine guidelines for writing an acceptable letter and memo which convey: acknowledgment, routine request, routine response, complaint, refusal, and persuasive request, for three of the six types listed
2.3.5 Examine samples of well-written and poorly written letters and memos

3.0 Informal Report

3.1 Examine the Fundamentals of Informal Business Reports

3.1.1 Identify the purpose of the informal report
3.1.2 Identify the parts and formats of an informal report
3.1.3 Identify methods of information gathering

3.2 Apply Informal Report Writing Skills and Oral Reporting Skills

3.2.1 Gather pertinent information
3.2.2 Organize information into an appropriate outline
3.2.3 Draft a five minute informal report
3.2.4 Edit, proofread, and revise the draft to create an effective informal report and present orally using visual aids.

MR 1220 CUSTOMER SERVICE

Description:

This course focuses on the role of providing quality customer service. It is important to have a positive attitude and the necessary skills to effectively listen and interpret customer concerns about a product, resolve customer problems, and determine customer wants and needs. Students will be able to use the skills and knowledge gained in this course to effectively provide a consistently high level of service to the customer.

Course Outcomes:

Upon successful completion of this course, students will:
- know and understand quality customer service
- know why quality service is important
- know and understand the relationship between "service" and "sales"
- understand the importance of and to demonstrate a positive attitude
- recognize and demonstrate handling of customer complaints

Required Knowledge and Skills:

1. Providing Quality Service
    - Define quality service
    - List the types of quality service
    - Define Service vs. Sales or Selling
    - Explain why quality service is important
    - Identify the various types of customers
    - Define customer loyalty

2. Determining Customers Wants and Needs
    - List four levels of customer needs
    - Identify important customer wants and needs
    - Identify ways to ensure repeat business

3. Demonstrating a Positive Attitude
    - List the characteristics of a positive attitude
    - Explain why it is important to have a positive attitude
    - List ways that a positive attitude can improve a customer's satisfaction
    - Define perception
    - Explain how perception can alter us and customers
    - Understand how to deal with perception

4. Effectively Communicating with customers
    - Describe the main elements in the communication process
    - Identify some barriers to effective communication
    - Define body language
    - Explain how body language would affect customers

- Determine why body language is important
- Define active listening and state why it is important
- Describe the four components of active living
- Contrast good and bad listeners
- List and discuss the steps of the listening process

5. Effectively using Questioning Techniques
    - List questioning techniques
    - Write two example of an open question
    - Perform a questioning and listening role play

6. Using the Telephone Effectively
    - List the qualities of a professional telephone voice
    - Explain why telephone skills are important
    - Demonstrate effective telephone skills

7. Asserting Oneself: Handling Complaints and Resolving Conflict
    - Define assertiveness
    - Define communication behaviours
    - Relate assertions to effective communication
    - Practice being assertive
    - Understand the process of assertive guidelines for action
    - Practice giving an assertive greeting
    - Acknowledge multiple customers

8. Dealing with Difficult Customers
    - Describe how you would deal with anger
    - Complete a guide to controlling feelings
    - Determine how you would feel dealing with an upset customer
    - Suggest some techniques that might control your own feelings
    - Understand leadership styles and the nature of organizations
    - List ways to dealing with conflict / customer criticism
    - Be aware of certain guidelines when confronting customers
    - List ways of preventing unnecessary conflict with customers
    - Review current skills and knowledge of customer service
    - Develop a customer satisfaction improvement plan

SP 2330 QUALITY ASSURANCE/QUALITY CONTROL

Description:

This course is designed to give students an understanding of the concepts and requirements of QA/QC such as, interpreting standards, controlling the acceptance of raw materials, controlling quality variables and documenting the process. It includes information on quality concepts, codes and standards, documentation, communications, human resources, company structure and policy, teamwork and responsibilities.

Course Outcomes:

Upon completion of this course, students will be able to:

- develop the skills and knowledge required to apply quality assurance/quality control procedures
- develop an awareness of quality management principles and processes

Required Knowledge and Skills:

1. Describe the reasons for quality assurance and quality plans.

2. Explain the relationship between quality assurance and quality control.

3. Describe quality control procedures as applied to the production and checking of engineering drawings in applicable occupations.

4. Describe quality control procedures as applied to the acceptance and checking of raw materials.

5. Explain the role of communications in quality management.

6. Explain why it is important for all employees to understand the structure of the company and its production processes.

7. Explain how human resource effectiveness is maximized in a quality managed organization.

8. Explain the role of company policy in quality management.

9. Explain the purpose of codes and standards.

10. Explain the concepts of quality

    a. cost of quality
    b. measurement of quality
    c. quality control and quality assurance
    d. elements of quality
    e. elements of the quality audit
    f. quality standards
    g. role expectations and responsibilities

11. Explain the structure of quality assurance and quality control

    a. Define quality assurance, quality control and documentation terminology
    b. Describe organizational charts
    c. List the elements of a quality assurance system
    d. Explain the purpose of the quality assurance manual
    e. Describe quality assurance procedures
    f. Explain the key functions and responsibilities of personnel

12. Complete quality assurance/quality control documentation

    a. Describe methods of recording reports in industry
    b. Describe procedures of traceability (manual and computer-based recording)
    c. Identify needs for quality control procedures

13. Apply quality control to projects

    a. Follow QA/QC procedures for drawings, plans and specifications in applicable occupations.
    b. Calibrate measuring instruments and devices in applicable occupations.
    c. Interpret required standards
    d. Follow QA/QC procedures for accepting raw materials
    e. Carry out the project
    f. Control the quality elements (variables)
    g. Complete QA/QC reports

MC 1050 INTRODUCTION TO COMPUTERS

Description:

This course is designed to give the student an introduction to computer systems. Particular emphasis is given to word processing, spreadsheet, e-mail and the Internet.

Course Outcomes:

Upon completion of this course, students will have a basic understanding of:

– computer systems and their operation.
– popular software packages, their applications and future trends in computer applications

Required Knowledge and Skills:

1. Microcomputer System Hardware and Software Components

    1.1 Microcomputer Hardware

        1.1.1 System Components

            1.1.1.1 Identify major components of a computer system.

        1.1.2 Function of each Component

            1.1.2.1 Describe the function of the microprocessor.
            1.1.2.2 Describe and give examples of I/O DEVICES.
            1.1.2.3 Describe primary storage (RAM, ROM, Cache).
            1.1.2.4 Define bit, byte, code and the prefixes k.m. and g.
            1.1.2.5 Describe secondary storage (diskettes and hard disks, CD ROMS, Zip Drives etc).
            1.1.2.6 Describe how to care for a computer and its accessories.

    1.2 Microcomputer Software

        1.2.1 Software Definition and Types

            1.2.1.1 Define software.
            1.2.1.2 Describe, operational and application software used in this course.
            1.2.1.3 Define file and give the rules for filenames and file extensions..

1.2.2 System Software (Windows 95)

1.2.2.1 Getting Started with Windows
1.2.2.2 Start and quit a Program
1.2.2.3 Get Help
1.2.2.4 Locate a specific file using the **find** function of Win95
1.2.2.5 Changing system settings:wall paper, screen saver, screen resolution, background.
1.2.2.6 Starting a program by using the Run Command
1.2.2.7 Shutting down your computer

1.2.3 File Management Commands (Windows 95)

1.2.3.1 View directory structure and folder content
1.2.3.2 Organizing files and folders
1.2.3.3 Copy, delete, and move files and folders
1.2.3.4 Create folders
1.2.3.5 Maximize and minimize a window
1.2.3.6 Print directory/folder content
1.2.3.7 Describe the Windows 95 taskbar

2. Word Processing

2.1 Keyboarding Techniques

2.1.1 Identify and locate alphabetic and numeric keys
2.1.2 Identify and locate function keys: special keys, home keys, page up key, page down key, numeric key pad, shift keys, punctuation keys, tab key

2.2 Word Processing

2.2.1 Understanding word processing

2.2.1.1 The Windows Component
2.2.1.2 The Menu Bar
2.2.1.3 Menu Indicators
2.2.1.4 The Document Window
2.2.1.5 The Status Bar
2.2.1.6 The Help Feature
2.2.1.7 Insertion Point Movements

2.2.2 Create a document

2.2.2.1 Change the Display
2.2.2.2 The Enter Key
2.2.2.3 Enter Text

2.2.3 Save, Open and Exit a document.

2.2.3.1 Save a document
2.2.3.2 Close a document.
2.2.3.3 Start a new document Window
2.2.3.4 Open a document
2.2.3.5 Exit Word Processor

2.2.4 Edit a Document

2.2.4.1 Add New Text
2.2.4.2 Delete text
2.2.4.3 Basic Format Enhancement (split and join paragraphs, insert text)

2.2.5 Understand Hidden Codes

2.2.5.1 Display Hidden Codes
2.2.5.2 Delete Text Enhancements

2.2.6 The Select Feature

2.2.6.1 Identify a Selection
2.2.6.2 Move a Selection
2.2.6.3 Copy a Selection
2.2.6.4 Delete a Selection
2.2.6.5 Select Enhancements
2.2.6.6 Save a Selection
2.2.6.7 Retrieve a Selection

2.2.7 Change Layout Format

2.2.7.1 Change layout format: (margins, spacing, alignment, paragraph indent, tabs, line spacing, page numbering)

2.2.8 Change Text Attributes

2.2.8.1 Change text attributes: (bold, underline, font, etc.)

2.2.9 Use Auxiliary Tools

2.2.9.1 Spell Check

2.2.10 Select the Print Feature

2.2.10.1 Select the Print Feature: (i.e; number of copies and current document)

2.2.10.2 Identify various options in print screen dialogue box

3. Electronic Spreadsheet

3.1 Spreadsheet Basics

3.1.1 The Worksheet Window

3.2 Operates Menus

3.2.1 Use a Menu Bar
3.2.2 Use a Control Menu
3.2.3 Use a Shortcut Menu
3.2.4 Save, Retrieve form Menus

3.3 Create a Worksheet

3.3.1 Enter Constant Values and Formulas
3.3.2 Use the Recalculation Feature
3.3.3 Use Cell References (relative and absolute references)

3.4 Use Ranges

3.4.1 Type a Range for a Function
3.4.2 Point to a Range for a Function
3.4.3 Select a Range for Toolbar and Menu Commands

3.5 Print a Worksheet

3.5.1 Print to the Screen
3.5.2 Print to the Printer
3.5.3 Print a Selected Range

3.6 Edit a Worksheet

3.6.1 Replace Cell Contents
3.6.2 Insert and Delete Rows and Columns
3.6.3 Change Cell Formats
3.6.4 Change Cell Alignments
3.6.5 Change Column Width
3.6.6 Copy and Move Cells

4. Electronic Mail and the Internet

4.1 Electronic Mail

4.1.1 Compose and send an e-mail message

4.1.2 Retrieve an e-mail attachments
4.1.3 Send an e-mail message with attachments
4.1.4 Retrieve and save e-mail attachments
4.1.3 Print an e-mail message
4.1.4 Delete an e-mail message

4.2 The Internet

4.2.1 Overview of the World Wide Web
4.2.2 Accessing Web sites
4.2.3 Internet Web Browsers
4.2.4 Internet Search Engines
4.2.5 Searching Techniques

SD 1700 WORKPLACE SKILLS

Description:

This course involves participating in meetings, doing safety inspections, completing employment insurance forms, writing letters of employment insurance appeal, and filing a human rights complaint. Includes information on formal meetings, unions, worker's compensation, employment insurance regulations, worker's rights and human rights.

Course Outcomes:

Upon completion of this course, students will be able to:
- Participate in meetings (conduct meetings).
- Be aware of union procedures
- Be aware of workers' compensation regulations.
- Be aware of occupational health and safety regulations.
- Be aware of employment insurance regulations
- Be aware of workers' rights.
- Be aware of human rights

Required Knowledge and Skills:

1. Meetings
   a. Explain preparation requirements prior to conducting a meeting
   b. Explain the procedures for conducting a meeting.
   c. Explain participation in meetings.
   d. Explain the purpose of motions.
   e. Explain the procedure to delay discussion of motions.
   f. Explain how to amend and vote upon a motion.

2. Unions
   a. Why do unions exist?
   b. Give a concise description of the history of Canadian labour.
   c. How do unions work?
   d. Explain labour's structure.
   e. Describe labour's social objectives.
   f. Describe the relationship between Canadian labour and the workers.
   g. Describe the involvement of women in unions.

3. Worker's Compensation
   a. Describe the aims, objectives, benefits and regulations of the Workers Compensation Board.
   b. Explain the internal review process.

4. Occupational Health and Safety
   a. Describe the rules and regulations directly related to your occupation.

5. Employment Insurance Regulations
    a. Explain employment insurance regulations
    b. Describe how to apply for employment insurance.
    c. Explain the appeal process.

6. Worker's Rights
    a. Define labour standards.
    b. Explain the purpose of the Labour Standards Act.
    c. List regulations pertaining to:
        i. Hours of work.
        ii. Minimum wages.
        iii. Employment of children.
        iv. Vacation pay

7. Human Rights
    a. Describe what information cannot be included on an application.
    b. Describe what information cannot be included in an interview
    c. Why is there a Human Rights Code?
    d. Define sexual harassment.

8. Participate in meetings.
    a. Follow the form of getting a motion on the floor
    b. Discuss a motion
    c. Amend a motion
    d. Vote on a motion.

9. Complete a safety inspection of your shop.

10. Complete an employment insurance application form.

11. Write a letter of appeal.

12. Analyze a documented case of a human rights complaint with special emphasis on the application form, time frame, documentation needed, and legal advice available.

SD 1710 JOB SEARCH TECHNIQUES

Description:

This fifteen-hour seminar is designed to give students an introduction to the critical elements of effective job search techniques.

Required Knowledge and Skills:

Examine and Demonstrate Elements of Effective Job Search Techniques

- Identify and examine employment trends and opportunities
- Identify sources that can lead to employment
- Discuss the importance of fitting qualifications to job requirements
- Discuss and demonstrate consideration in completing job application forms
- Establish the aim/purpose of a resume
- Explore characteristics of effective resumes, types of resumes, and principles of resume format
- Explore characteristics of and write an effective cover letter
- Explore, and participate in a role play of a typical job interview with commonly asked questions and demonstrate proper conduct
- Explore other employment related correspondence
- Explore the job market to identify employability skills expected by employer
- Conduct a self-analysis and compare with general employer expectations

SD 1720 ENTREPRENEURIAL AWARENESS

Description:

This fifteen-hour seminar is designed to introduce the student to the field of entrepreneurship, including the characteristics of the entrepreneur, the pros and cons of self-employment, and some of the steps involved in starting your own business.

Required Knowledge and Skills:

1. Explore Self-Employment: An Alternative to Employment
    - Identify the advantages and disadvantages of self-employment vs. regular employment
    - Differentiate between an entrepreneur and a small business owner
    - Evaluate present ideas about being in business

2. Explore the Characteristic of Entrepreneurs
    - Identify characteristics common to entrepreneurs
    - Relate their own personal characteristics with those of entrepreneurs.
    - Evaluate their present ideas about business people

3. Identifying Business Opportunities
    - Distinguish between an opportunity and an idea.
    - List the existing traditional and innovative business ventures in the region.
    - Explain the general parameters between which business ventures should fit.
    - Summarize the role of such agencies Regional Economic Development Boards, Business Development Corporations, etc.
    - Identify potential business opportunities within the region.

4. Demystifying the Entrepreneurial Process.
    - Explain the entrepreneurial process
    - Describe the purpose of a business plan
    - Identify the main ingredients of a business plan
    - Summarize the role of such agencies as BDC's, ACOA, Women's Enterprise Bureau etc.
    - List other agencies where assistance - financial and otherwise - is available to those interested in starting a business venture.