

# Painter and Decorator Level 3

## Painter and Decorator

**Unit:** A5 Pre-Certification Review

**Level:** Three

**Duration:** 45 hours

Theory: 45 hours

Practical: 0 hours

### Overview:

This unit offers senior apprentices a systematic review of skills and knowledge required to pass the Interprovincial 'Red Seal' Examination. It promotes a purposeful personal synthesis between on-the-job learning and the content of in-school technical training. The unit includes information about the significance of Red Seal Interprovincial certification and the features of the Interprovincial exam. A "pass/fail" grade will be awarded upon completion of the unit.

### Objectives and Content:

**Percent of  
Unit Mark (%)**

1. **Describe the significance, format and general content of Interprovincial (Red Seal) Examinations for the trade of Painter and Decorator.**
  - a. Scope and aims of Red Seal System; value of certifications
  - b. Obligations of candidates for IP certification
    - Relevance of IP examinations to current, accepted trade practices; industry-based national validation of test items
    - Supplemental policy (retesting)
    - Confidentiality of examination content
  - c. Multiple-choice format (four-option) item format, Red Seal/Apprenticeship Branch standards for acceptable test items
  - d. Government materials relevant to the IP examinations for apprentice painter and decorators
    - National Occupational Analysis (NOA); prescribe scope of the skills and knowledge which comprise the trade
    - NOA "pie-chart" and its relationship to content distribution of IP examination items
    - Manitoba Apprentice Portfolio, especially the NOA-based Practical Training Record Book and task/sub-task checklists as these relate to apprentice's coverage of the skills and knowledge of his/her trade
  
2. **Identify resources, strategies and other considerations for maximizing successful completion of written exams.**
  - a. Personal preparedness
    - Rest
    - Nutrition
    - Personal study regimen
    - Prior experience in test situations (e.g. unit tests)
  - b. Self-assessment, consultation and personal study plan
    - Self-assessment of individual strengths/weaknesses in trade-related skills and knowledge

- Approved textbooks
- Study groups

3. **Review program content regarding common occupational skills.**
4. **Review program content regarding occupational documents.**
5. **Review program content regarding substrate preparation.**
6. **Review program content regarding finish applications.**

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## Painter and Decorator

**Unit:** B2 Drawing, Interpretation and Specifications II

**Level:** Three

**Duration:** 28 hours

Theory: 14 hours

Practical: 14 hours

### Overview:

Upon completion of this unit of instruction the apprentice will demonstrate knowledge and a basic understanding of drawing, interpretation and specifications. Units include: drawings, sketches, blueprints, scale rule, reduction rule, drawing to scale and standard specifications.

<b>Objectives and Content:</b>	<b><u>Percent of Unit Mark (%)</u></b>
<b>1. Identify different types of drawings and sketches.</b>	<b>10%</b>
a. Oblique	
b. Isometric	
c. Perspective	
<b>2. Read and interpret blueprints and drawings.</b>	<b>10%</b>
a. Floor plans	
b. Title block information	
c. Elevations	
d. Auxiliary views	
e. Working drawings	
f. Sections and material symbols on construction drawings	
g. Painting schedules	
h. Scale drawings	
i. Isometric	
<b>3. Describe the use of the scale rule and the reduction rule.</b>	<b>10%</b>
<b>4. Draw a simple drawing to scale.</b>	<b>17%</b>
<b>5. Perform job planning from drawings.</b>	<b>18%</b>
<b>6. State the purpose of a standard specification.</b>	<b>10%</b>
<b>7. State the relationship of specifications to drawings.</b>	<b>10%</b>
<b>8. Locate information in a standard specification.</b>	<b>15%</b>

## Painter and Decorator

**Unit:** C3 Trade Mathematics III: Estimating Material/Time

**Level:** Three

**Duration:** 21 hours

Theory: 0 hours

Practical: 21 hours

### Overview:

Upon completion of this unit of instruction the apprentice will demonstrate knowledge and an skills required to perform painter and decorator-related estimations.

<b>Objectives and Content:</b>	<b><u>Percent of Unit Mark (%)</u></b>
1. Estimate materials and supplies needed for various projects/jobs.	20%
2. Estimate using drawings and specifications.	20%
3. Estimate amount of material or time required for various rooms and buildings.	20%
4. Estimate amount of wall coverings using: a. Strip method b. Area method	20%
5. Estimate with unit costs, including quoting job/project prices.	20%

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## Painter and Decorator

**Unit:** D4 Work Site Preparation

**Level:** Three

**Duration:** 20 hours

Theory: 10 hours

Practical: 10 hours

### Overview:

Upon completion of this unit of instruction the apprentice will demonstrate knowledge and an understanding of work site preparation. Units include: blasting tools and equipment, preparing previously painted surfaces, preparing unpainted surfaces, and repairing substrate defects.

<b>Objectives and Content:</b>	<b><u>Percent of Unit Mark (%)</u></b>
1. <b>Identify the proper tools and equipment required for preparation of substrate by blasting.</b> a. Hydro b. Dry c. Wet	<b>50%</b>
2. <b>Demonstrate ability to prepare previously painted surfaces for the application of coatings.</b>	<b>15%</b>
3. <b>Prepare unpainted surfaces for the application of coatings.</b>	<b>20%</b>
4. <b>Demonstrate ability to repair substrate defects.</b>	<b>15%</b>

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## Painter and Decorator

**Unit:** E4 Colour III

**Level:** Three

**Duration:** 35 hours

Theory: 15 hours

Practical: 20 hours

### Overview:

Upon completion of this unit of instruction the apprentice will demonstrate knowledge and a basic understanding of paint, colour and mixing. Units include: conventional coatings, proper method to complete various practical assignments, additive theory and effect of light on colour, and the subtractive theory.

<b>Objectives and Content:</b>	<b><u>Percent of Unit Mark (%)</u></b>
1. Demonstrate the ability to mix specified colours using colourants.	25%
2. Create a colour scheme for a project.	12%
3. Identify the effects of colour on structures.	50%
4. Select and apply a colour scheme to a previously painted or prepared surface.	13%
a. True complement	
b. Split complement	
c. Mutual complement	
d. Double complement	
e. Monographic	
f. Triad	
g. Analogous	
h. Alternate	
i. Adjacent	

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## Painter and Decorator

**Unit:** E7 Industrial Materials III

**Level:** Three

**Duration:** 21 hours

Theory: 21 hours

Practical: 0 hours

### Overview:

Upon completion of this unit of instruction the apprentice will demonstrate knowledge and an understanding of industrial materials. Units include: corrosion process as it relates to metal substrates, industrial substrates, surface preparation, solvents and abrasives.

<b>Objectives and Content:</b>	<b><u>Percent of Unit Mark (%)</u></b>
<b>1. Identify steps regarding pre-job start-up.</b>	<b>30%</b>
a. Perform checks for grease, oil and/or soluble chlorides	
b. Check ambient conditions	
c. Fabrication imperfections	
d. White rag rub test	
e. Water break test	
f. Black light test	
g. Soluble chloride analysis	
h. pH test	
i. Air temperature reading	
j. Surface temperature reading	
k. Psychrometric reading and charts	
<b>2. Identify the surface preparation process before applying industrial coatings.</b>	<b>30%</b>
<b>3. Identify the application process concerning industrial coatings.</b>	<b>40%</b>

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## Painter and Decorator

**Unit:** F4 Spraying II

**Level:** Three

**Duration:** 10 hours

Theory: 5 hours

Practical: 5 hours

### Overview:

Upon completion of this unit of instruction the apprentice will demonstrate knowledge and a further understanding of spraying. Units include: test methods, H.V.L.P. system, air assisted airless spray system, electrostatic system, and spray booths.

<b>Objectives and Content:</b>	<b><u>Percent of Unit Mark (%)</u></b>
<b>1. Apply test methods for industrial coatings.</b> a. Wet coatings b. Dry coatings	<b>15%</b>
<b>2. Describe and operate a High Volume Low Pressure (H.V.L.P.) Spray System.</b> a. Function of components b. Maintain and storage	<b>25%</b>
<b>3. Describe and operate an Air Assisted Airless Spray System.</b> a. Function of components b. Identify uses	<b>25%</b>
<b>4. Describe and operate an Electrostatic System.</b> a. Function of components b. Proper grounding c. Identify uses	<b>25%</b>
<b>5. Identify types of spray booths and discuss operation.</b> a. Maintain and storage	<b>10%</b>

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## Painter and Decorator

**Unit:** F5 Drywall Finishing

**Level:** Three

**Duration:** 35 hours

Theory: 20 hours

Practical: 15 hours

### Overview:

Upon completion of this unit of instruction the apprentice will demonstrate knowledge and a basic understanding of drywall finishing. Units include: appropriate drywall materials, mixing compounds, filling applications, and the sanding process.

<b>Objectives and Content:</b>	<b><u>Percent of Unit Mark (%)</u></b>
<b>1. Identify and describe appropriate drywall materials.</b>	<b>15%</b>
a. Appropriate filling compounds	
b. Manufacturer's specifications	
c. Types of drywall tape	
d. Filler/substrate combination	
<b>2. Demonstrate ability to mix selected compound to suit site conditions.</b>	<b>20%</b>
<b>3. Describe proper filling applications.</b>	<b>20%</b>
a. Drying conditions	
b. Embedding tape	
c. Rough coat	
d. Skim coat	
<b>4. Demonstrate ability to apply filler to suit site conditions.</b>	<b>15%</b>
<b>5. Identify and describe the finish sanding process.</b>	<b>15%</b>
a. Abrasives	
b. Sanding techniques	
c. Sanding joints	
d. Identify and repair deficiencies	
<b>6. Demonstrate ability to perform finish sanding.</b>	<b>15%</b>

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## Painter and Decorator

**Unit:** G4 Wallcovering II

**Level:** Three

**Duration:** 30 hours

Theory: ## hours

Practical: ## hours

### Overview:

Upon completion of this unit of instruction the apprentice will demonstrate knowledge and a basic understanding of wallcovering. Units include: preparation, base coats, types, sizes and dimensions, wallpaper patterns and borders, adhesives, cutting, folding, turning corners, natural and synthetic materials, seams, and hanging panels.

<b>Objectives and Content:</b>	<b><u>Percent of Unit Mark (%)</u></b>
1. <b>Identify the correct procedure required to fold wallcoverings for application.</b>	<b>5%</b>
a. Walls	
b. Ceilings	
2. <b>Discuss the correct method used in cutting and trimming.</b>	<b>10%</b>
3. <b>Identify the correct method used in applying wallcoverings around obstacles.</b>	<b>7%</b>
4. <b>Identify the types of seams used in wallcoverings.</b>	<b>5%</b>
a. Butt	
b. Lap	
c. Wire-edge	
5. <b>Describe the correct method required when turning interior and exterior corners.</b>	<b>5%</b>
6. <b>Describe the correct procedure when applying wallcoverings to various locations.</b>	<b>8%</b>
a. Sloped walls	
b. Circular walls	
c. Columns	
d. Ovals	
e. Stairwells	
f. Feature walls	
g. Complete rooms	
h. Ceilings	
7. <b>Describe the properties of natural and synthetic wallcoverings.</b>	<b>5%</b>
a. Types	
b. Application procedures	
c. Double-cut seams	

8. **Identify the correct procedure for hanging paneled walls.** **5%**
- a. Field
  - b. Proportion of stiles
  - c. Layout procedure
  - d. Practice applying wallcoverings
9. **Practice applying wallcoverings.** **50%**

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## Painter and Decorator

**Unit:** G5 Specialty Finishes

**Level:** Three

**Duration:** 35 hours

Theory: 15 hours

Practical: 20 hours

### Overview:

Upon completion of this unit of instruction the apprentice will demonstrate knowledge and a basic understanding of specialty finishes. Units include: decorative finishes, materials and tools, glaze, illusion of structure, gilding, metallic leaf, contemporary and heritage schemes, stencil and graphic effects, and application to prepared surface.

<b>Objectives and Content:</b>	<b><u>Percent of Unit Mark (%)</u></b>
<p><b>1. Describe the following decorative finishes.</b></p> <ul style="list-style-type: none"> <li>a. Spatter finish</li> <li>b. Multi-colour spraying</li> <li>c. Sponge</li> <li>d. Rag stippling</li> <li>e. Stenciling</li> <li>f. Texture paints</li> <li>g. Striping and lining</li> <li>h. Antique glazing</li> <li>i. Antique highlighting</li> <li>j. Mottling</li> <li>k. Woodgraining</li> <li>l. Marbleizing</li> <li>m. Gilding</li> </ul>	<b>5%</b>
<b>2. List the materials and tools required to achieve decorative finishes for specific projects.</b>	<b>10%</b>
<b>3. Describe methods required for obtaining decorative finishes.</b>	<b>5%</b>
<b>4. Identify the correct surface required for the application of special decorative finishes.</b>	<b>5%</b>
<b>5. Describe the process required to achieve the desired effect by applying a glaze over a selected ground colour.</b>	<b>5%</b>
<b>6. Describe the process required to produce the illusion of structure, depth and texture by techniques of agitating a wet semi-transparent glaze to achieve the desired effect through broken colour.</b>	<b>5%</b>

7. **Describe gilding process and correct gilding size.** **5%**  
a. Wood  
b. Metal  
c. Plaster  
d. Glass
8. **Describe the process in applying metallic leaf.** **5%**  
a. Rolled gold  
b. Hammered gold  
c. Silver leaf (palladium)  
d. Aluminum leaf
9. **Discuss layout and design through geometric calculations of designing and cutting of plates in both contemporary and heritage schemes.** **5%**
10. **Demonstrate ability to apply stencil and graphic effects using tapes, templates and geometric principles to achieve desired results.** **25%**
11. **Demonstrate ability to apply a variety of decorative finishes to a prepared surface.** **25%**

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