L1 PAINTING - COMMERCIAL & RESIDENTIAL

LEVEL 1

Curriculum Notes

- 155 Hours (includes Core)
- Revised: 1997

ISBN 978-0-13-771239-7

NCCER Painting Levels 1-4 are available for purchase through Amazon® and are searchable by ISBN. Individual modules are not available for purchase at this time.

MODULES

The modules listed below are included in the Trainee Guide. The following ISBNs are for ordering individual modules only.

Careers in the Painting Trade *(5 Hours)*

(Module ID 07101) Presents a brief history of the painting trade. Covers career opportunities, from apprenticeship/helper to managerial/business-related work. Describes the characteristics of the successful tradesperson, including productivity, appearance, personal hygiene, and dependability.

Safety *(10 Hours)*

(Module ID 07102) Provides an overview of construction site hazards and safety precautions for those in the painting trade. Covers methods of rigging and care of ladders, scaffolds, swing devices, and other equipment.

Ladders, Scaffolds, Lifts, and Fall Protection *(10 Hours)*

(Module ID 07103) Covers methods of erecting, using and maintaining ladders, scaffolds, and lifts. Discusses fall protection equipment and safety practices used when working on ladders, scaffolds, and lifts.

Identifying Surface/Substrate Materials and Conditions *(5 Hours)*

(Module ID 07104) Explains how to identify types of surfaces used in construction including wood, metal, masonry/concrete, plaster/drywall and synthetic substrates. Also discusses how to identify new, aged, or previously coated surface conditions of substrates and coatings.

Protecting Adjacent Surfaces *(5 Hours)*

(Module ID 07105) Describes the tools, materials, and methods used for protecting adjacent surfaces and areas prior to surface preparation, paint spraying, etc.

Basic Surface Preparation *(15 Hours)*

(Module ID 07106) Covers the tools, materials, and methods used for cleaning, repairing, and penetrating surfaces/substrates in preparation for coating. Describes basic methods used for surface preparation of wood, metal, plaster/drywall, cementitious, and synthetic surfaces/substrates.

Sealants and Repair/Fillers *(5 Hours)*

(Module ID 07107) Describes the characteristics of common sealants and fillers. Covers guidelines for selecting sealants/fillers and the tools and methods used to apply them to substrates.

Introduction to Paints and Coatings *(10 Hours)*

(Module ID 07108) Describes the basic ingredients and film-forming processes common to all paints and coatings. Covers paint systems and functional categories of paints and coatings. Focuses on water-based alkyd paints and coatings.

Brushing and Rolling Paints and Coatings *(15 Hours)*

(Module ID 07109) Covers the types and selection of brushes, rollers, pads, mitts, and related accessories used for applying paints and coatings. Includes techniques used for brushing and rolling paints and coatings on interior and exterior surfaces. Also recommends maintenance and storage methods.

L2 PAINTING - COMMERCIAL & RESIDENTIAL

LEVEL 2

Curriculum Notes

- 145 Hours
- Revised: 1997

ISBN 978-0-13-771296-0

MODULES

The modules listed below are included in the Trainee Guide. The following ISBNs are for ordering individual modules only.

Painting Failures and Remedies *(7.5 Hours)*

(Module ID 07201) Describes failures of paints/coatings on exterior and interior substrates, causes of these failures, and their remedies. Focuses on the nature of the substrates, application procedures, and surface preparation.

Job Planning and Completion *(10 Hours)*

(Module ID 07202) Explains the process for estimating a job to submit a bid. Also covers the processes for planning and accomplishing a job from start to finish with emphasis placed on the importance and use of drawings, specifications, schedules, and other instructions.

Chemical Cleaning and Stripping *(7.5 Hours)*

(Module ID 07203) Describes chemical cleaners and strippers and how they are used to clean and/or remove unwanted material from substrates.

Low-Pressure Water Cleaning *(7.5 Hours)*

(Module ID 07204) Covers the design and function of low-pressure washing equipment, including procedures for the safe operation and maintenance of typical equipment.

Abrasive Blasting *(7.5 Hours)*

(Module ID 07205) Covers the basic design and function of abrasive blasting equipment, including general procedures for its use, related industry standards, and safety and health considerations.

Drywall Finishing and Patching *(25 Hours)*

(Module ID 07206) Covers the materials and procedures used for drywall finishing and patching. Emphasizes techniques for finishing and patching drywall, including the use and care of tools, equipment and supplies, and safety.

Stains *(7.5 Hours)*

(Module ID 07207) Describes the different classes and/or kinds of stains, including their composition, selection for use, and application considerations.

Clear Finishes *(7.5 Hours)*

(Module ID 07208) Introduces the composition, uses, and application of clear finishes, including varnishes, lacquers, shellacs, and urethanes.

Wood Finishing *(22.5 Hours)*

(Module ID 07209) Presents the science and technology of wood and wood products. Provides procedures and techniques for wood surface preparation and the application of clear finishes to various kinds of wood.

Coatings Two *(10 Hours)*

(Module ID 07210) Introduces the unique properties of high-performance coatings. Includes safety and health considerations, surface preparation, application, testing, and inspection.

Spray Painting *(Conventional, Airless and HVLP) (32.5 Hours)*

(Module ID 07211) Covers the design and function of conventional, airless, and HVLP spraying equipment, including procedures for the safe operation and maintenance of typical equipment.

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L3 PAINTING - COMMERCIAL & RESIDENTIAL

LEVEL 3

Curriculum Notes

- 152.5 Hours
- Revised: 1998

ISBN 978-0-13-949041-5

MODULES

The modules listed below are included in the Trainee Guide. The following ISBNs are for ordering individual modules only.

Painting Failures and Remedies Two *(7.5 Hours)*

(Module ID 07301) Explains how to recognize and remedy paint/coating failures caused by improper preparation and application of coatings, as well as coating discoloration.

Job Supervision, Planning, and Control *(15 Hours)*

(Module ID 07302) Covers skills and leadership traits associated with the successful supervisor, including how to supervise and motivate employees, how to estimate a job, the use of contract documents, and methods for controlling materials and tools/equipment.

Coatings Three *(15 Hours)*

(Module ID 07303) Describes unique properties, safety and health considerations, surface preparation, application, and testing, and inspection of high-performance coatings used primarily to protect substrates for commercial or light industrial applications.

Color and Tinting *(10 Hours)*

(Module ID 07304) Presents the theory and definition of color. Describes procedures for mixing, tinting, and matching colors. The use of the color wheel and the Munsell, Federal Standard 595B, and other color systems are also explained.

Decorative (Faux) Finishes *(22.5 Hours)*

(Module ID 07305) Describes techniques for glazing, antiquing, stippling, mottling, gilding, marbling, and graining decorative finishes.

Wallcovering *(40 Hours)*

(Module ID 07306) Covers the wallcovering process from start to finish. Includes equipment and materials, estimating methods, surface preparation, adhesives and installation, and failures and remedies.

Graphics *(12.5 Hours)*

(Module ID 07307) Describes types of graphics and their uses, methods of transferring graphic patterns to a surface, building code regulations, and other factors in the use of graphics.

Texturing *(10 Hours)*

(Module ID 07308) Explains the characteristics of various texturing materials, surface preparation procedures, and techniques for producing different patterns.

Spraying with Special Devices *(20 Hours)*

(Module ID 07309) Covers the design and function of texture, cold roof coating, electrostatic, and plural component spraying equipment. Includes procedures for the safe operation and maintenance of typical equipment.

L4 PAINTING - INDUSTRIAL

LEVEL 4

Curriculum Notes

- 152.5 Hours
- Revised: 1998

ISBN 978-0-13-910100-7

MODULES

The modules listed below are included in the Trainee Guide. The following ISBNs are for ordering individual modules only.

Safety *(10 Hours)*

(Module ID 07401) Provides an overview of the safety hazards and precautions for working on construction sites, with a focus on the industrial painting trade and applications.

Ladders, Scaffolds, Lifts, and Fall Protection *(15 Hours)*

(Module ID 07402) Describes methods for erecting, using, and maintaining ladders, scaffolds, and lifts. Covers fall protection equipment and safety practices for working on ladders, scaffolds, and lifts.

Containment/Ventilation *(7.5 Hours)*

(Module ID 07403) Introduces methods for limiting dust, debris, hazardous material, etc., from contaminating the environment and injuring people. Bases content on the monitoring components and methods recommended in SSPCGuide 6 (CON). Covers ventilation methods used for the control of emissions released to the atmosphere and to protect the worker within a containment enclosure.

Surface Preparation One *(15 Hours)*

(Module ID 07404) Covers the tools, materials, and methods used for cleaning and preparing surfaces/substrates by solvent cleaning, hand tool cleaning, and power tool cleaning methods. Bases content on the methods and procedures specified by the following SSPC/NACE standards: SSPC-SP1, SSPC-SP2, SSPC-SP3, SSPC-SP11, and SSPC-SP13/NACE 6.

Surface Preparation Two *(20 Hours)*

(Module ID 07405) Covers the tools, materials, and methods used for cleaning and preparing surfaces/substrates using various types of abrasive blasting equipment. Bases content on the methods and procedures specified by the following SSPC/NACE standards: SSPC-SP5/NACE 1, SSPC-SP10/NACE 2, SSPCSP6/NACE 3, SSPC-SP7/NACE 4.

Surface Preparation Three *(7.5 Hours)*

(Module ID 07406) Covers the tools, materials, and methods used for cleaning and preparing surfaces/substrates by chemical stripping, pickling, high-pressure water-jetting, and ultra high-pressure water jetting. Bases content on the methods and procedures specified by the following SSPC/NACE standards: SSPC-SP8 and SSPC-SP12/NACE 5.

Industrial Coatings *(12.5 Hours)*

(Module ID 07407) Covers the basic ingredients and filmforming processes common to all paints and coatings and describes paint systems and the different functional categories of paints and coatings. Introduces the unique properties, safety and health considerations, and surface preparation and application of high-performance coatings used to protect substrates for industrial applications.

Coating Application and Equipment *(25 Hours)*

(Module ID 07408) Covers equipment and methods used to apply coatings by the following methods: brushes and rollers, conventional sprayers, airless and air-assisted sprayers, highvolume low pressure (HVLP) sprayers, electrostatic sprayers, plural component proportioning equipment, wire flame and wire arc sprayers, and dry powder coating application process.

Quality Inspections *(15 Hours)*

(Module ID 07409) Introduces formal quality control tasks and procedures used to govern the quality and acceptance of work performed by those in the industrial painting industry. Also describes the methods, equipment, and test instruments used to perform tasks in accordance with the requirements of ASTM and SSPC/NACE standards governing quality control and quality assurance.

Coatings Failures and Analysis *(7.5 Hours)*

(Module ID 07410) Explains how to recognize failures of paints/coatings on exterior and interior substrates, causes of these failures, and their remedies. Focuses on the nature of the substrates, application procedures, and surface preparation.

Specialty Materials *(7.5 Hours)*

(Module ID 07411) Describes the characteristics and types of sealants and fillers commonly used in industrial application. Covers sealers and putties used in conjunction with tank and vessel reinforced lining systems, as well as fire resistant and fire retardant sealing materials. Gives guidelines for selecting the materials covered, along with the tools and methods used for applying them on steel, concrete, and other construction substrates.