July 2001

Florida Department of Education CURRICULUM FRAMEWORK

Program Title: Painting and Decorating Occupational Area: Industrial Education

| | Secondary | PSAV |
|-----------------|------------------|------------------|
| Program Numbers | 8721500 | I460408 |
| CIP Number | 0646.040800 | 0646.040800 |
| Grade Level | 9-12, 30, 31 | 30, 31 |
| Length | 4 credits | 600 hours |
| Certification | TEC CONSTR ¶7 ¶G | TEC CONSTR ¶7 ¶G |
| | PAINTING @7 G | PAINTING @7 G |
| | BLDG CONST ¶7 ¶G | BLDG CONST ¶7 ¶G |

I. <u>MAJOR CONCEPTS/CONTENT</u>: The purpose of this program is to prepare students for employment as painters and paper hangers (87402563), painters (840.381-010).

The content includes, but is not limited to, communication skills, leadership skills, human relations and employability skills, safe and efficient work practices, materials and cost estimates, surface preparation, paint mixing and matching, application procedures, special effects, wall covering application, blueprint reading, ladder and scaffold erection and use, selection, application and care of materials, use of hand and power tools, and use of current industry standards, practices and techniques.

Listed below are the courses that comprise this program when offered at the secondary level:

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8721510 - Painting 1
8721520 - Painting 2
8721530 - Painting and Decorating 3
8721540 - Painting and Decorating 4
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This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Painting and Decorating industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

- II. <u>LABORATORY ACTIVITIES</u>: Shop or laboratory activities are an integral part of this program and provide instruction in preparation of surfaces, application of coatings and coverings, scaffold and ladder erection, mixing and matching paints and application of wallpaper.
- III. SPECIAL NOTE: SkillsUSA-VICA, Inc. is the appropriate Career and Technical Student Organization (CTSO) for providing leadership training and for reinforcing specific career and technical skills. Career and Technical Student Organizations, when provided, shall be an integral part of the career and technical instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, FAC.

Cooperative training - OJT is appropriate for this program. Whenever cooperative training - OJT is offered, the following are

required for each student: a training plan, signed by the student, teacher, and employer, which includes instructional objectives and a list of on-the-job and in-school learning experiences; a workstation that reflects equipment, skills and tasks that are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

In accordance with Rule 6A-10.040, FAC, the minimum basic-skills grade levels required for adult vocational students to complete this program are: Mathematics 9.0, Language 9.0, Reading 9.0. These grade-level numbers correspond to grade-equivalent scores obtained on one of the state-designated basic-skills examinations. If a student does not meet the basic-skills level required for completion of the program, remediation should be provided concurrently through Vocational Preparatory Instruction (VPI). Please refer to the Rule for exemptions.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high-order thinking skills.

When a secondary student with a disability is enrolled in a vocational class with modifications to the curriculum framework, the particular outcomes and student performance standards, which the student must master to earn credit, must be specified on an individual basis. The job or jobs for which the student is being trained should be reflected in the student's desired postschool outcome statement on the Transition Individual Educational Plan (Transition IEP).

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

When this program is offered at the postsecondary level it may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643, F.S.

The standard length of this program is 600 hours.

IV. <u>INTENDED OUTCOMES</u>: After successfully completing the program, the student will be able to:

OCCUPATIONAL COMPLETION POINT - A (600 Hours)

- 01.0 Demonstrate the ability to work safely.
- 02.0 Select, use, and care for tools and equipment, scaffolding and ladders.
- 03.0 Demonstrate proficiency in the preparation of surfaces.
- 04.0 Demonstrate the use of the materials used in painting.
- 05.0 Demonstrate proper application of materials used in painting using brushes, rollers and sprayers

- 06.0 Fit and apply wallpaper.
- 07.0 Mix colors and match samples.
- 08.0 Apply stains, varnishes, lacquers and acrylics.
- 09.0 Use chemical stripping and cleaning solutions.
- 10.0 Estimate costs and provide quotations.
- 11.0 Advise on the suitability of different materials.
- 12.0 Demonstrate appropriate communication skills.
- 13.0 Demonstrate appropriate math skills.
- 14.0 Demonstrate appropriate understanding of basic science.
- 15.0 Demonstrate employability skills.
- 16.0 Demonstrate an understanding of entrepreneurship.

Program Title: Painting And Decorating

Secondary Number: 8721500 Postsecondary Number: 1460408

OCCUPATIONAL COMPLETION POINT - A

- 01.0 <u>DEMONSTRATE THE ABILITY TO WORK SAFELY</u>--The student will be able to:
 - 01.01 Explain the hazards of working above ground and appropriate work habits.
 - 01.02 Explain and demonstrate safe use of hand and power tools.
- 02.0 SELECT, USE AND CARE FOR TOOLS AND EQUIPMENT, SCAFFOLDING AND LADDERS--The student will be able to:
 - 02.01 Erect a scaffold.
 - 02.02 Demonstrate proper use of folding and extension ladders.
 - 02.03 Explain proper storage of flammable materials.
 - 02.04 Explain and demonstrate proper cleaning and storage of tools and equipment.
- 03.0 DEMONSTRATE PROFICIENCY IN PREPARATION OF SURFACES -- The student will be able to:
 - 03.01 Prepare new wood surfaces for coating with paint.
 - 03.02 Remove old wall coverings.
 - 03.03 Prepare and seal walls for wallcoverings.
 - 03.04 Prime plaster and sheetrock surfaces for painting.
 - 03.05 Prepare metal surfaces for painting.
 - 03.06 Use sandblasting equipment to remove old surface coatings.
 - 03.07 Spackle/patch sheetrock and plaster surfaces.
- 04.0 DEMONSTRATE THE USE OF THE MATERIALS USED IN PAINTING--The student will be able to:
 - 04.01 Explain the criteria for selection and use of water and chemical based coatings.
 - 04.02 Select brushes, roller covers and spray equipment for coatings to be used.
- 05.0 DEMONSTRATE PROPER APPLICATION OF MATERIALS USED IN PAINTING USING BRUSHES, ROLLERS, AND SPRAYERS--The student will be able to:
 - 05.01 Paint a surface using a brush.
 - 05.02 Paint trim with a brush.
 - 05.03 Paint a surface with a roller.
 - 05.04 Spray paint a surface.
- 06.0 FIT AND APPLY WALLPAPER--The student will be able to:
 - 06.01 Select and mix paste (for non-prepasted) wall coverings.
 - 06.02 Apply grass cloth wall covering.
 - 06.03 Apply paper wall covering.
 - 06.04 Apply foil wall covering.
 - 06.05 Apply Mylar wall covering.
 - 06.06 Apply cloth-backed wallcovering.

- 06.07 Match a pattern to a corner.
- 06.08 Fit wall paper around a window and door.
- 07.0 MIX COLORS AND MATCH SAMPLES--The student will be able to:
 - 07.01 Identify fundamental colors.
 - 07.02 Explain the process of mixing to arrive at custom colors or tints.
 - 07.03 Mix paint to match a given sample.
- 08.0 APPLY STAINS, VARNISHES, LACQUERS AND ACRYLICS--The student will be able to:
 - 08.01 Stain woodwork to a uniform color.
 - 08.02 Stain wood to match a sample.
 - 08.03 Seal wood for finishing.
 - 08.04 Apply a varnish finish to a prepared wood surface.
 - 08.05 Apply an oil finish to a prepared wood surface.
 - 08.06 Apply a lacquer finish to a prepared wood surface.
 - 08.07 Apply an acrylic finish to a prepared wood surface.
- 09.0 <u>USE CHEMICAL STRIPPING AND CLEANING SOLUTIONS</u>--The student will be able to:
 - 09.01 Remove a finish from a painted surface using a chemical solution.
 - 09.02 Use prepared solutions to clean a surface.
 - 09.03 Apply rust inhibitors to metal surfaces.
- 10.0 ESTIMATE COST AND PROVIDE QUOTATIONS -- The student will be able to:
 - 10.01 Compute number of rolls of wallpaper required for a specified job.
 - 10.02 Compute amount of paint for a specified job.
- 11.0 $\underline{\text{ADVISE ON SUITABILITY OF DIFFERENT MATERIALS}}_{\text{able to:}}$ --The student will be
 - 11.01 Select a suitable type of wallcovering based on surface of wall and environment.
 - 11.02 Select a suitable type of coating based on surface, anticipated wear and environment.
- 12.0 <u>DEMONSTRATE APPROPRIATE COMMUNICATION SKILLS</u>--The student will be able to:
 - 12.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
 - 12.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
 - 12.03 Read and follow written and oral instructions.
 - 12.04 Answer and ask questions coherently and concisely.
 - 12.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
 - 12.06 Demonstrate appropriate telephone/communication skills.
- 13.0 DEMONSTRATE APPROPRIATE MATH SKILLS--The student will be able to:

- 13.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
- 13.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
- 13.03 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
- 13.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
- 13.05 Demonstrate an understanding of federal, state and local taxes and their computation.

14.0 <u>DEMONSTRATE APPROPRIATE UNDERSTANDING OF BASIC SCIENCE</u>--The student will be able to:

- 14.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
- 14.02 Draw conclusions or make inferences from data.
- 14.03 Identify health-related problems, which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
- 14.04 Understand pressure measurement in terms of P.S.I., inches of mercury, and K.P.A.

15.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 15.01 Conduct a job search.
- 15.02 Secure information about a job.
- 15.03 Identify documents, which may be required when applying for a job interview.
- 15.04 Complete a job application form correctly.
- 15.05 Demonstrate competence in job interview techniques.
- 15.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other employees.
- 15.07 Identify acceptable work habits.
- 15.08 Demonstrate knowledge of how to make job changes appropriately.
- 15.09 Demonstrate acceptable employee health habits.
- 15.10 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes Chapter 442.

16.0 <u>DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP</u>--The student will be able to:

- 16.01 Define entrepreneurship.
- 16.02 Describe the importance of entrepreneurship to the American economy.
- 16.03 List the advantages and disadvantages of business ownership.
- 16.04 Identify the risks involved in ownership of a business.
- 16.05 Identify the necessary personal characteristics of a successful entrepreneur.
- 16.06 Identify the business skills needed to operate a small business efficiently and effectively.

Course Number: 8721510
Course Title: Painting 1

Course Credit: 1

COURSE DESCRIPTION:

This course is designed to provide instruction in safe and proper use and care of related tools and equipment proper safety practices, the use storage and disposal materials.

- 01.0 DEMONSTRATE THE ABILITY TO WORK SAFELY--The student will be able to:
 - 01.01 Explain the hazards of working above ground and appropriate work habits.
 - 01.02 Explain and demonstrate safe use of hand and power tools.
- 02.0 SELECT, USE AND CARE FOR TOOLS AND EQUIPMENT, SCAFFOLDING AND LADDERS--The student will be able to:
 - 02.01 Erect a scaffold.
 - 02.02 Demonstrate proper use of folding and extension ladders.
 - 02.03 Explain proper storage of flammable materials.
 - 02.04 Explain and demonstrate proper cleaning and storage of tools and equipment.
- 03.0 <u>DEMONSTRATE PROFICIENCY IN PREPARATION OF SURFACES</u>--The student will be able to:
 - 03.01 Prepare new wood surfaces for coating with paint.
 - 03.02 Remove old wall coverings.
 - 03.03 Prepare and seal walls for wallcoverings.
 - 03.04 Prime plaster and sheetrock surfaces for painting.
 - 03.05 Prepare metal surfaces for painting.
 - 03.06 Use sandblasting equipment to remove old surface coatings.
 - 03.07 Spackle/patch sheetrock and plaster surfaces.
- 09.0 <u>USE CHEMICAL STRIPPING AND CLEANING SOLUTIONS</u>--The student will be able to:
 - 09.01 Remove a finish from a painted surface using a chemical solution.
 - 09.02 Use prepared solutions to clean a surface.
 - 09.03 Apply rust inhibitors to metal surfaces.
- 10.0 ESTIMATE COST AND PROVIDE QUOTATIONS -- The student will be able to:
 - 10.01 Compute number of rolls of wallpaper required for a specified job.
 - 10.02 Compute amount of paint for a specified job.

- 12.0 <u>DEMONSTRATE APPROPRIATE COMMUNICATION SKILLS</u>--The student will be able to:
 - 12.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
 - 12.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
 - 12.03 Read and follow written and oral instructions.
 - 12.04 Answer and ask questions coherently and concisely.
 - 12.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
 - 12.06 Demonstrate appropriate telephone/communication skills.

13.0 DEMONSTRATE APPROPRIATE MATH SKILLS--The student will be able to:

- 13.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
- 13.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
- 13.03 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
- 13.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
- 13.05 Demonstrate an understanding of federal, state and local taxes and their computation.

Course Number: 8721520
Course Title: Painting 2

Course Credit: 1

COURSE DESCRIPTION:

This course is designed to provide instruction in the proper use and care of painting equipment, selection, mixing and application of materials used in painting.

- 04.0 DEMONSTRATE THE USE OF THE MATERIALS USED IN PAINTING--The student will be able to:
 - 04.01 Explain the criteria for selection and use of water and chemical based coatings.
 - 04.02 Select brushes, roller covers and spray equipment for coatings to be used.
- 05.0 DEMONSTRATE PROPER APPLICATION OF MATERIALS USED IN PAINTING USING BRUSHES, ROLLERS, AND SPRAYERS--The student will be able to:
 - 05.01 Paint a surface using a brush.
 - 05.02 Paint trim with a brush.
 - 05.03 Paint a surface with a roller.
 - 05.04 Spray paint a surface.
- 07.0 MIX COLORS AND MATCH SAMPLES--The student will be able to:
 - 07.01 Identify fundamental colors.
 - 07.02 Explain the process of mixing to arrive at custom colors or tints.
 - 07.03 Mix paint to match a given sample.
- 14.0 <u>DEMONSTRATE APPROPRIATE UNDERSTANDING OF BASIC SCIENCE</u>--The student will be able to:
 - 14.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
 - 14.02 Draw conclusions or make inferences from data.
 - 14.03 Identify health-related problems, which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
 - 14.04 Understand pressure measurement in terms of P.S.I., inches of mercury, and K.P.A.

Course Number: 8721530

Course Title: Painting and Decorating 3

Course Credit: 1

COURSE DESCRIPTION:

This course is designed to provide instruction in the preparation of surfaces for finishes, the selection, mixing and application of stains, varnishes, lacquers and finishes.

- 08.0 <u>APPLY STAINS, VARNISHES, LACQUERS AND ACRYLICS</u>--The student will be able to:
 - 08.01 Stain woodwork to a uniform color.
 - 08.02 Stain wood to match a sample.
 - 08.03 Seal wood for finishing.
 - 08.04 Apply a varnish finish to a prepared wood surface.
 - 08.05 Apply an oil finish to a prepared wood surface.
 - 08.06 Apply a lacquer finish to a prepared wood surface.
 - 08.07 Apply an acrylic finish to a prepared wood surface.
- 11.0 ADVISE ON SUITABILITY OF DIFFERENT MATERIALS--The student will be able to:
 - 11.01 Select a suitable type of wallcovering based on surface of wall and environment.
 - 11.02 Select a suitable type of coating based on surface, anticipated wear and environment.

Course Number: 8721540

Course Title: Painting and Decorating 4

Course Credit: 1

COURSE DESCRIPTION:

06.0 FIT AND APPLY WALLPAPER--The student will be able to:

- 06.01 Select and mix paste (for non-prepasted) wall coverings.
- 06.02 Apply grass cloth wall covering.
- 06.03 Apply paper wall covering.
- 06.04 Apply foil wall covering.
- 06.05 Apply mylar wall covering.
- 06.06 Apply cloth-backed wallcovering.
- 06.07 Match a pattern to a corner.
- 06.08 Fit wall paper around a window and door.
- 15.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 15.01 Conduct a job search.
 - 15.02 Secure information about a job.
 - 15.03 Identify documents, which may be required when applying for a job interview.
 - 15.04 Complete a job application form correctly.
 - 15.05 Demonstrate competence in job interview techniques.
 - 15.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other employees.
 - 15.07 Identify acceptable work habits.
 - 15.08 Demonstrate knowledge of how to make job changes appropriately.
 - 15.09 Demonstrate acceptable employee health habits.
 - 15.10 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes Chapter 442.
- 16.0 <u>DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP</u>--The student will be able to:
 - 16.01 Define entrepreneurship.
 - 16.02 Describe the importance of entrepreneurship to the American economy.
 - 16.03 List the advantages and disadvantages of business ownership.
 - 16.04 Identify the risks involved in ownership of a business.
 - 16.05 Identify the necessary personal characteristics of a successful entrepreneur.
 - 16.06 Identify the business skills needed to operate a small business efficiently and effectively.