Alabama Department of Postsecondary Education

Representing the Alabama Community College System

STATEWIDE CAREER/TECHNICAL EDUCATION COURSE ARTICULATION REVIEW MINUTES

Articulation Agreement Identifier: ABR 123 (2005-1) Identifier is the postsecondary course prefix followed by Plan-of-Instruction version number (e.g.; INT 100 (2005-1)).

Applicable CIP code(s): 47.0603

Postsecondary course prefix, number, and title: ABR 123 Paint Application and Equipment

Secondary Course(s) of Study: 471101/570030 - Painting and Refinishing I + 471103/570031 - Painting and Refinishing II

Initial Review: September 17, 2009 Annual DPE Review: January 24, 2012

Effective date: **Fall Semester 2011**.

Course Content Analysis (all postsecondary course objectives must be sufficiently addressed in the secondary courses):

Notes:

1. **Skills and knowledge contained in the postsecondary course objectives must be present in the corresponding secondary objectives for a "match" to occur.**
2. **Postsecondary and Secondary objectives must reflect similar content and performance levels before the course articulation agreement will be recommended to the TEDAC Oversight Committee.**
3. **More than one Secondary course may be used in order to articulate to a Postsecondary course.**

Postsecondary Course Objectives	Secondary Course(s) and Location(s)	TEDAC Comments
Competency: A1.0 Set up and adjust paint application equipment A1.1 Inspect, clean, and determine condition of spray guns and related equipment. A1.1.1 Identify spray gun and related equipment components. A1.1.2 Explain inspection and cleaning procedures for spray guns and related equipment. A1.2 Check and adjust spray gun operation for HVLP (high volume, low pressure) or LVLP (low volume, low pressure) guns. A1.2.1 Describe HVLP and LVLP gun operation. A1.2.2 Describe HVLP and LVLP gun adjustment. A1.2.3 Explain the process of checking and adjusting spray guns. A1.3 Set-up (fluid needle, nozzle, and cap), adjust, and test spray gun using fluid, air, and pattern control valves. A1.3.1 Identify fluid, air, and pattern control valves. A1.3.2 Explain the set-up and adjustment process for spray guns	**Painting & Refinishing I, Unit 3** **Content Standard** 3. Demonstrate inspection and cleaning of spray guns and related equipment. **Learning Objectives** 1. Identify spray gun and related equipment components. 2. Explain inspection and cleaning procedures for spray guns and related equipment. 3. Clean and set-up (fluid needle, nozzle, and cap), adjust, and test spray gun using fluid, air, and pattern control valves. 4. Check and adjust spray gun operation for HVLP (high volume, low pressure) or LVLP (low volume, low pressure) guns. 5. Inspect, clean, and determine condition of spray guns and related equipment. **Painting & Refinishing II, Unit 3** **Content Standard** 3. Demonstrate the proper care and use of high-volume, low-pressure (HVLP) or low-volume, low-pressure (LVLP) spray guns. **Learning Objectives** 1. Explain the process of applying primer and primer products to repaired areas. 2. Explain appropriate spray techniques (gun arc, gun angle, gun distance, gun speed, and spray patter overlap). 3. Explain finish application techniques. 4. Determine appropriate finish application techniques for finish being applied.	

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	5. Identify manufacturer's recommendation for selected products. 6. Define the terms "test panel" and "let-down panel". 7. Explain the application of selected products on test and let down panels.	
Competency: B1.0 Paint vehicular surfaces B1.1 Determine type and color of paint already on vehicle by manufacturer's vehicle information label. B1.1.1 Identify manufacturer's vehicle information label locations. B1.1.2 Identify paint code on information label. B1.1.3 Match paint code to type and color of paint on vehicle. B1.2 Shake, stir, reduce, catalyze/activate, and strain paint according to manufacturer's procedures. B1.2.1 Identify manufacturer's procedures for shaking, stirring, reducing, catalyzing/activating, and straining paint. B1.2.2 Differentiate between shaking, stirring, reducing, catalyzing/activating and straining. B1.2.3 Explain the processes of shaking, stirring, reducing, catalyzing/activating, and straining paint. B1.3 Apply finish using appropriate spray techniques (gun arc, gun angle, gun distance, gun speed, and spray pattern overlap) for the finish being applied. B1.3.1 Explain appropriate spray techniques (gun arc, gun angle, gun distance, gun speed, and spray patter overlap). B1.3.2 Explain finish application techniques. B1.3.3 Determine appropriate finish application techniques for finish being applied. B1.4 Apply selected product on test and let-down panel in	**Painting & Refinishing I, Unit 4** **Content Standard** 4. Determine type and color of paint on the vehicle according to manufacturer's vehicle information. **Learning Objectives** 1. Explain the processes of inspecting and identifying substrate. 2. List types of finishing. 3. List possible surface conditions. 4. Identify various finishing conditions. 5. Identify various surface conditions. 6. Identify primers, surfacers, and sealers. 7. Determine manufacturers' specifications for mixing primers, surfacers, and sealers. 8. Explain the mixing process for primers, surfacers, and sealers. 9. Determine type and color of paint already on vehicle by manufacturer's vehicle information label. 10. Identify manufacturer's vehicle information label locations. 11. Identify paint code on information label. 12. Match paint code to type and color of paint on vehicle. 13. Begin painting practice. **Painting & Refinishing II, Unit 4** **Content Standard** 4. Determine techniques for mixing paint for use in spray guns.	

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accordance with manufacturer's recommendations; check for color match. B1.4.1 Identify manufacturer's recommendation for selected products. B1.4.2 Define the terms test panel and let-down panel. B1.4.3 Explain the application of selected products on test and let down panels. B1.5 Apply single stage topcoat for refinishing. B1.5.1 Define the term single stage top coat. B1.5.2 Explain the application of single stage topcoat for refinishing. B1.6 Apply basecoat/clearcoat for panel blending or partial refinishing. B1.6.1 Explain the concept of partial refinishing. B1.6.2 Define the terms basecoat and clearcoat. B1.6.3 Explain panel blending. B1.6.4 Explain the application of basecoat/clearcoat for panel blending B1.7 Apply basecoat/clearcoat for overall refinishing. B1.7.1 Explain the concept of overall refinishing. B1.7.2 Explain the application of basecoat/clearcoat for overall refinishing. B1.8 Denib, buff, and polish finishes where necessary. B1.8.1 List materials used to denib, buff, and polish finishes. B1.8.2 Explain principles of denibing, buffing, and polishing finishes. B1.9 Identify the types of rigid, semi-rigid or flexible plastic parts to be refinished; determine the materials, preparation, and refinishing procedures. B1.9.1 List the types of rigid, semi-rigid, or flexible plastic	**Learning Objectives** 1. Shake, stir, reduce, catalyze/activate, and strain paint according to manufacturer's procedures. 2. Identify and mix paint using a formula. 3. Identify alternative color formula to achieve a blendable match. 4. Define blending. 5. Describe matching techniques. 6. Explain the process of blending. 7. Identify manufacturer's procedures for shaking, stirring, reducing, catalyzing/activating, and straining paint. 8. Differentiate between shaking, stirring, reducing, catalyzing/activating and straining. 9. Identify manufacturer's procedures for shaking, stirring, reducing catalyzing/activating, and straining paint. 10. Explain the processes of shaking, stirring, reducing, catalyzing/activating, and straining paint. 11. Define multi-stage coat. 12. Explain the application of multi-stage coats. 13. Identify paint formulas. 14. Describe paint mixing techniques. 15. Define tint coloring. 16. Describe tint coloring to achieve a blendable match. 17. Select alternative color formulas. **Painting & Refinishing I, Unit 5** **Content Standard** 5. Identify paint defects. **Learning Objectives** 1. Define hiding colors. 2. Identify poor hiding colors; determine necessary action.	

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parts. B1.9.2 Identify materials for refinishing. B1.9.3 Identify preparation, and refinishing procedures. B1.10 Refinish rigid, semi-rigid and flexible plastic parts. B1.10.1 Explain the process of refinishing rigid, semi-rigid, and flexible plastic parts. B1.11 Clean, condition and refinish vinyl (e.g. upholstery, dashes, and tops). B1.11.1 Identify materials for cleaning, conditioning, and refinishing vinyl. B1.11.2 Explain the cleaning, conditioning, and refinishing processes for vinyl. B1.12 Apply multi-stage (tricoat) coats for panel blending or overall refinishing. B1.12.1 Define multi-stage coat. B1.12.2 Explain the application of multi-stage coats. B1.13 Identify and mix paint using a formula. B1.13.1 Identify paint formulas. B1.13.2 Describe paint mixing techniques. B1.14 Identify poor hiding colors; determine necessary action. B1.14.1 Define hiding colors. B1.14.2 Determine course of action to correct poor hiding colors. B1.15 Tint color using formula to achieve a blendable match. B1.15.1 Define tint coloring. B1.15.2 Describe tint coloring to achieve a blendable match. B1.16 Identify alternative color formula to achieve a blendable	3. Tint color using formula to achieve a blendable match. 4. List materials used to denib, buff, and polish finishes. 5. Explain principles of denibing. 6. Explain principles of buffing. 7. Explain principles of polishing finishes. 8. Determine course of action to correct painting defects. **Painting & Refinishing II, Unit 6** **Content Standard** 6. Describe causes of paint defects. **Learning Objectives** 1. List common paint defects. 2. Discuss the causes of paint defects. 3. Discuss the remedies for correcting paint defects. 4. Demonstrate the ability to successful correct assorted paint and finish defects. **Painting & Refinishing I, Unit 6** **Content Standard** 6. Describe procedures involved with final detail for painting and refinishing. 7. Summarize procedures for the completion of an estimate of repair. **Learning Objectives** 1. Define the term “single stage” top coat. 2. Explain the application of single stage topcoat for refinishing. 3. Explain the concept of partial refinishing. 4. Define the terms basecoat and clearcoat. 5. Explain panel blending.	

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match. B1.16.1 Select alternative color formulas.	6. Explain the application of basecoat/clearcoat for panel blending. 7. Explain the concept of overall refinishing. 8. Explain the application of basecoat/clearcoat for overall refinishing. 9. List and explain final detail and its components. 10. List the components found in an estimate of repair. 11. Define the components found in an estimate of repair. 12. List the procedures used to complete an estimate of repair. 13. Describe a refinishing plan. 14. Understand an estimate of repair. **Painting & Refinishing II, Unit 7-8** **Content Standard** 7. Explain procedures involved with final detail in painting and refinishing. 8. Explain procedures for the completion of an estimate of repair in painting and refinishing. **Learning Objectives** 1. List the components generally considered as final detail. 2. Discuss methods and procedures used. 3. Demonstrate the ability to complete the final detail of a painting/refinishing job. 4. Explain common forms used to prepare estimates. 5. Use references and manufacturers material to produce estimates. 6. Complete estimates of repair for a variety of painting and refinishing jobs.	