REFINISH BLENDING AND PAINTING DEFECTS
Course Syllabus

Course Number:  ART-0830  
OHLAP Credit:  No
OCAS Code:  None
Course Length:  45 Hours
Career Cluster:  Transportation, Distribution & Logistics
Career Pathway:  Automotive Collision Repair
Career Major(s):  Collision Repair Technician

Pre-requisite(s):  In this course the student will learn masking techniques specific to the blending. Students will learn how to apply the refinish material to perform an undetectable repair. Included in this course will be instruction on how to determine the cause and corrective action for refinishing defects and failures.

Textbooks:  

Course Objectives:  
A. Identify Finish Defects, Causes and Cures
1. Identify poor adhesion; determine the causes(s); correct the condition. (HP-G) ¹
2. Identify paint cracking (crows feet or line-checking, micro-checking, etc.) correct the condition. (HP-G) ¹
3. Identify corrosion; determine the cause(s), and correct the condition. (HP-G) ¹
4. Identify dirt or dust in paint surface; determine cause & correct the problem. (HP-I) ¹
5. Identify water spotting; determine the cause(s) and correct the condition. (HP-G) ¹
6. Identify finish damage caused by bird droppings, tree sap, and other natural causes; correct the condition. (HP-G) ¹
7. Identify finish damage caused by airborne contaminants; (acids, soot, rail dust, and other industrial-related causes) correct the condition. (HP-G) ¹
8. Identify die-back conditions (dulling of the paint film showing haziness); determine the cause(s) and correct the condition. (HP-G) ¹
9. Identify chalking (oxidation); correct the condition. (HP-G) ¹
10. Identify bleed through (staining); determine the cause(s) and correct the condition. (HP-G) ¹
11. Identify solvent popping in freshly painted surface; determine the cause and correct the condition. (HP-G) ¹

B. Solve Paint Application Problems
1. Identify blistering (raising of the paint surface); determine the cause(s); correct the condition. (HP-G) ¹
2. Identify blushing (milky or hazy formation); determine the cause(s); correct the condition. (HP-G) ¹
3. Identify crows feet or crazing appearance in paint surface; determine the cause(s); correct the condition. (HP-G) ¹
4. Check for contamination in the painted surface; identify the source(s); correct the condition. (HP-G) ¹
5. Identify a dry spray pattern in the paint surface; determine the cause(s); correct the condition. (HP-G) ¹
6. Identify the presence of fish-eyes (crater-like openings) in the finish after it has been applied; determine the cause(s); correct the condition. (HP-G) ¹
7. Identify lifting; determine the cause(s); correct the condition. (HP-G) ¹
8. Identify clouding, mottling and streaking in metallic paint finishes; determine the cause(s); correct the condition. (HP-G) ¹
9. Identify orange peel; determine the cause(s); correct the condition. (HP-I) ¹
10. Identify overspray; determine the cause(s); correct the condition. (HP-G) ¹
11. Identify solvent popping freshly painted surface; determine the cause(s); and correct the condition. (HP-G) ¹
12. Identify pin-holing; determine the cause(s) and correct the condition. (HP-G) ¹
13. Identify sags and runs in paint surface; determine the cause(s); correct the condition. (HP-G) ¹
14. Identify sanding marks (sandscratch swelling); determine the cause(s); and correct the condition. (HP-G) ¹
15. Identify contour mapping (shrinking and splitting) while finish is drying; determine the cause(s); correct the condition. (HP-G) ¹
16. Identify color difference (off-shade); determine the cause(s); correct condition. (HP-G) ¹
17. Identify tape tracking; determine the cause(s); correct the condition. (HP-G) ¹
18. Identify bleed-through; determine the cause(s); correct the condition. (HP-G) ¹
19. Identify buffing-related imperfections (swirl marks, burns); correct condition. (HP-G) ¹
20. Identify low gloss condition; determine the cause(s) and correct the condition. (HP-G) ¹
21. Identify pigment flotation (color change through film build); determine the cause and correct the condition. (HP-G) ¹
22. Measure mil thickness. (HPI) ¹

¹ASE objective
All unmarked objectives are TTC instructor developed.

Teaching Methods: The class will primarily be taught by the lecture and demonstration method and supported by various media materials to address various learning styles. There will be question and answer sessions over material covered in lecture and media presentations. Supervised lab time is provided for students to complete required projects.

Grading Procedures: 1. Students are graded on theory and shop practice and performance.
2. Each course must be passed with seventy (70%) percent or better.
3. Grading scale: A=90-100%, B=80-89%, C=70-79%, D=60-69%, F=50-59%.

Description of Classroom, Laboratories, and Equipment: Tulsa Technology Center campuses are owned and operated by Tulsa Technology Center School District No. 18. All programs provide students the opportunity to work with professionally certified instructors in modern, well-equipped facilities.
## REFINISH BLENDING AND PAINTING DEFECTS

<table>
<thead>
<tr>
<th>Available Certifications/ College Credit</th>
<th>The student may be eligible to take state, national or industry exam after completion of the program. College credit may be issued from Oklahoma State University-Okmulgee or Tulsa Community College. See program counselor for additional information.</th>
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<td>College Credit Eligibility:</td>
<td>The student must maintain a grade point average of 2.0 or better.</td>
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