Course Information Form (CIF)

Course Code: ACR 274

Course Title: Advanced Refinish Techniques

Department: Applied Sciences and Technologies
PCS Code: 1.2 - Occupational/Technical Instruction
CIP Code: 47.0603
Repeatability: 0

Effective Date: Summer 2026

Credit Hours

Catalog Notation: 2-2-3
Credit Hour Distribution:

Lecture: 2	Lab: 2	Clinical: 0	**Total: 3**

General Course Information

Catalog Description

Advanced color theory, color evaluation and tinting, mica/pearl control techniques, wet bed blends, let down panels, tri-coats, quad-coats, advanced spot repair, paint defect evaluation and repair.

General Course Objectives

Reinforce and build upon the student's basic refinish knowledge in order for them to develop into an efficient production painter.

Minimum Placement Levels

English	Reading	Math
Placement into ENG 098	Placement into CCS 098	Placement into MAT 059

Prerequisites

Credit in ACR 137

Methods of Evaluation

2 exams, 8 lab sheets, and 2 practical tests.

Instructional Materials and Additional Supplies

Auto Collision Repair and Refinishing, Michael Crandall

Course Content

General Learning Outcomes (GLOs)

- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Mica, Pearl, and Special Flake Evaluation	1. Identify all types of mica finishes on today's car. 2. Utilize computers to research data online from OEM sources and I-CAR website about paint code information and application techniques.	1	1	0
Candy/Solid Color Evaluation	1. Identify all types and variants of solid and candy colors on today's vehicle.	1	1	0
Let Down Panels	1. Create a let down panel to check color match on both tri- and quad-coat colors.	2	2	0
Solvent Selection	1. Select appropriate solvent to match temperature and metallic control objectives.	1	1	0
Spray and Blending Techniques	1. Demonstrate spray techniques, air pressure, and equipment selection to match the finish being applied. 2. Demonstrate use of computer magnehelic for correct air movement in spray booths for water base materials.	4	4	0
Spot Repair	1. Identify solvents, specialty products, and sanding and polishing techniques to perform invisible spot repairs.	3	3	0
Color Evaluation and Tinting	1. Identify and differentiate between hue, value, and chrome to select the appropriate toner to modify a formula for an acceptable match. 2. Operate computer weighing system for mixing and tinting colors.	6	6	0
Defect Evaluation	1. Identify the cause of all types of physical and environmental paint damage.	2	2	0
Defect Removal	1. Practice specialized sanding and polishing techniques to remove paint finish defects.	2	2	0
Waterborne Products, Systems, and Application	1. Define waterborne materials, identify applications, and apply waterborne products as directed.	6	6	0
Hazardous Airborne Pollutant Reduction	1. Identify HAPs, demonstrate use of appropriate protection equipment, and define collision repair liabilities, responsibilities, and EPA regulations.	2	2	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
30	30	0