AUT 245

I. CATALOG DESCRIPTION

A. Prerequisite: AUT 240 Auto Collision: Paint III

B. 3 semester hours of credit

C. This course is the fourth of four I-CAR certified paint classes. Auto Collision: Paint IV covers cleanup; decals and pin stripping; paint finishing using abrasives, compounds, and glazes; finish defect removal; and final detailing

II. EXPECTED LEARNING OUTCOMES/ASSESSMENT MEASURE

<table>
<thead>
<tr>
<th>Students will describe pre-repair cleanup including removal of bio-hazards.</th>
<th>Demonstration and exam.</th>
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<tbody>
<tr>
<td>Students will remove paint overspray, sanding dust, and body filler from exterior interior of vehicle.</td>
<td>Demonstration and class projects.</td>
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<tr>
<td>Students will remove stains and odor and clean carpet, upholstery, headliner, and interior.</td>
<td>Demonstration and class projects.</td>
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<tr>
<td>Students will obtain product sheets and MSDS for under coatings and blackout paint and apply blackout paint to underbody and undercoating to fenders and underside of vehicle.</td>
<td>Demonstration, class projects, and homework.</td>
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<tr>
<td>Students will apply decals, transfers, pin stripping, and painted stripes to the car body.</td>
<td>Demonstration and class projects.</td>
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<tr>
<td>Students will wet and dry sand painted surfaces demonstrating the process of dust nib, sag, and run removal utilizing personal protective equipment.</td>
<td>Demonstration, class assignments, class projects, and exam.</td>
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<tr>
<td>Students will obtain MSDS for compounds, glazes, wipes, and cleaners; remove swirl marks; perform a complete polish procedure on freshly cured paint; utilize appropriate personal protective equipment.</td>
<td>Demonstration, class assignments, class projects, final project and exam.</td>
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<tr>
<td>Students will use sanding and buffing equipment to remove finish defects and resort gloss.</td>
<td>Demonstration, class assignment, class project, final project and exam.</td>
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<td>Students will remove stains using the pH scale and remove odors.</td>
<td>Demonstration, class projects, final project and exam.</td>
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<tr>
<td>Students will use a detailer’s checklist for final inspection of the painted vehicle.</td>
<td>Demonstration, class projects, final project and exam.</td>
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III. COURSE OUTLINE WITH UNIT OBJECTIVES *(sections III. and IV. have been combined*)

_Cleanup and Delivery – Program 1_

A. Pre-Repairs Cleanup
   A. Explain the bio-hazard removal process (body fluids from accident) that is performed before any body work is performed.

B. Pre-Delivery Cleanup
   A. Know the process of removing overspray from the exterior glass.
   B. Explain proper technique for interior glass cleaning.
   C. Explain proper removal of sanding dust, paint overspray and body filler from interior trim and upholstery.
   D. Remove stains from carpet and upholstery.
   E. Explain the process of cleaning a headliner.
   F. Know the process of removing odors from the interior.
   G. Properly wash vehicle exterior, remove overspray, remove swirl marks and remove sanding dust from engine compartment.

C. Underbody Coatings
   A. Explain the use of black-out paint and determine the locations where used on the underbody.
   B. Explain the advantages and use of undercoatings.
   C. Obtain product sheet and MSDS for undercoating and black out paint.
   D. Properly apply undercoating to the fenders and visible underside areas of a vehicle.

_Decals and Pin Stripping - Program 1_

A. Decals and Transfers
   A. Explain surface preparation for application of a decal.
   B. Know proper personal protection for cleaning surface.
   C. Apply a decal using the dry application method.
   D. Apply a decal using the wet application method.
   E. Explain surface preparation for application of a transfer.
   F. Properly apply a transfer.

B. Pin Stripping
   A. Describe the methods of application for pin stripping.
   B. Understand surface preparation for pinstripe applications
   C. Properly apply pinstripe decal tape.
   D. Properly apply pinstripe fine line masking tape and prepare surface for painting.
   E. Spray paint pinstripe on car body.
F. Understand the technique for hand painting pin stripping on a vehicle.

C. Painted Stripes
   A. Describe the masking process for applying painted on stripes.
   B. Properly prepare surface for painting stripes.
   C. Spray paint the stripes to the car body.

**Paint Finishing – Program 1**

A. Paint Finishing Abrasives
   A. Explain wet sanding process for dust nib, sag, and run removal.
   B. Explain dry sanding process for dust nib, sag, and run removal.
   C. Properly wet sand a painted surface with wet/dry polishing paper.
   D. Explain the advantages using dry polishing foam discs to reduce polishing time.
   E. Know and use the proper personal protection equipment when sanding.

B. Compounds and Glazes
   A. Know multi-step processes from different manufacturers for polishing.
   B. Obtain a product sheet and MSDS sheet for the compounds and glazes in use.
   C. Explain the properties of extra-cut rubbing compounds are used in the process.
   D. Explain the properties of rubbing compounds.
   E. Explain the properties of swirl mark removers.
   F. Explain the properties of final glazes.
   G. Know and use the proper personal protection equipment when polishing.

C. Polishing Pads
   A. Describe the properties of wool polishing pads.
   B. Properly use a wool polishing pad on a painted surface with rubbing/polish compound.
   C. Describe the properties of foam polishing pads.
   D. Properly use a foam polishing pads on a painted surface.
   E. Following a product sheet for a polishing system, perform a complete polish procedure on freshly cured paint.

D. Wipes, Glazes and Cleaners
   A. Explain the advantages of using detailing cloths.
   B. Describe the properties of a gloss enhancer.
   C. Describe the properties of cleaner clay.
   D. Obtain product sheets and MSDS sheets for wipes, glazes and cleaners.

**Refinishing - Program 4**

A. Inspection of the Finish
A. Understand how to use masking materials to reduce clean-up steps.
B. Identify tools that can be used for inspection a finish.
C. Identify types of finish damage.
D. Understand detailing chemistry.

B. Finish Defect Removal
   A. Determine how to monitor film thickness and what to keep in mind on original finish and refinish.
   B. Use clay and nib sanders for small defect removal.
   C. Explain why starting with the least aggressive method is important.
   D. Use sanding equipment and techniques for removing finish defects.
   E. Use buffing equipment and techniques for removing finish defect and restore gloss.

C. Final Detailing
   A. Define a detailer’s checklist and why a checklist is important.
   B. Define materials for final exterior and interior detailing.
   C. Remove a stain using the pH scale.
   D. Remove odors.
   E. Define the final exterior touch-up steps.

IV. METHOD OF INSTRUCTION
   A. Lecture
   B. Demonstration
   C. Lab experience

V. REQUIRED TEXTBOOK(S) WITH PUBLICATION INFORMATION
   I-CAR material provided by instructor

VI. REQUIRED MATERIALS (STUDENT – student may have equipment from previous class)
   Safety glasses
   Gloves
   Respirator
   Note paper and pen/pencil

VII. SUPPLEMENTAL REFERENCES
   A. Industry web sites

VIII. METHOD OF EVALUATION (basis for determining grade)
A. Demonstration and participation
B. Homework
C. Quizzes
D. Projects
E. Tests
D. Comprehensive final examination

IX. ADA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Library; phone 636-797-3000, ext. 169).

X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook (see College Website).