COURSE INFORMATION FORM

DISCIPLINE: Automotive Technology

COURSE TITLE: Non-Structural Analysis and Damage Repair

CR. HR. 6  LECT HR. 3  LAB HR. 9.5  CLIN/INTERN HR.  N/A  CLOCK HR.  N/A

CATALOG DESCRIPTION
The analysis of the condition and the repair or replacement of non-structural components of automobiles and light trucks.

PREREQUISITES
Acceptance into the Articulation Program for Auto Collision Repair.

EXPECTED STUDENT OUTCOMES IN THE COURSE
Upon completion of this course, the student will be able to:

1. Identify non-structural components on a vehicle.
2. Analyze non-structural damage.
3. Repair or replace components in accordance with industry standards.
CLASS-LEVEL ASSESSMENT MEASURES

Student accomplishment of expected student outcomes will be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Written test. (1, 2)
2. Observation of performance in laboratory. (2, 3)
3. Laboratory test based on industry standards. (2, 3)

PROGRAM-LEVEL OUTCOMES ADDRESSED

General Education Outcomes
Specify which general education outcomes, if any, are substantially addressed by the course by completing the “Course/Program Assessment Matrix” to show the relationship between course and program outcomes and assessment measures.

Occupational Program Outcomes
Specify which occupational program outcomes, if any, are substantially addressed by the course by completing the “Course/Program Assessment Matrix” to show the relationship between course and program outcomes to assessment measures.
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Body shop safety, tools and equipment
   A. Shop safety
   B. Tools of the industry
   C. Materials and disposal methods
   D. Identification of non-structural analysis and damage repair approaches

II. Damage repair plan
   A. Development of plan
   B. Determination of appropriate methods for implementation

III. Removal and replacement of auto body parts
   A. Exterior and interior trim and moldings
   B. Non-structural body panels that may interfere with or be damaged during repairs

IV. Removal of auto body parts
   A. Corrosion protection, under-coatings, sealers and repairable plastics
   B. Bolted, bonded and welded steel panel or panel assemblies

V. Removal, replacement and alignment of auto body parts
   A. Hood, hood hinges and hood latch
   B. Doors, deck lids, tailgates and hatches

VI. Checking and alignment of front fenders, headers, bumper assemblies and components

VII. Straightening and rough-out of contours of damaged panels prior to filling or metal finish

VIII. Welding of auto body parts
   A. Cracked or torn steel body panels
   B. Repair of broken welds
   C. Restoration of corrosion protection

IX. Replacement of door skins and door intrusion beams

X. Replacement and repair of plastics
   A. Rigid, semi-rigid and flexible plastic panels
   B. Restoration of sealers, mastic, sound deadners and foam fillers

XI. Diagnosis and repair of leaks
   A. Water leaks
   B. Dust leaks
   C. Wind noise
XII. Restoration of metal finish panels
   A. Filing, sanding and dollying
   B. Heat and shrink methods
   C. Grinding and sanding

XIII. Mixing and application of body filler, sanding and finishing to contour

XIV. Removal, replacement, repair or adjustment of moveable glass and hardware