COURSE TITLE : VEHICLE BODY REPAIRING
COURSE CODE : 5031
COURSE CATEGORY : E
PERIODS/WEEK : 4
PERIODS/SEMESTER : 72
CREDITS : 4

TIME SCHEDULE

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<th>MODULE</th>
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<td>Classification of coach work, Vehicle body materials</td>
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<td>Vehicle body repairs and maintenance</td>
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OBJECTIVES

1.1.0 Recognize the various body members of the automotive vehicle
   1.1.1 Identify types of body
   1.1.2 List major body sections
   1.1.3 Explain construction details of a body components

2.1.0 Identify the different types of coach work
   2.1.1 State the objectives of coach work
   2.1.2 List the vehicle body materials
   2.1.3 Describe the properties of vehicle body materials
   2.1.4 Explain the different process involved in coach work
   2.1.5 Describe the layout of different class of vehicle.

3.1.0 Understand the different types of repairs and specific tools used for the repair work
   3.1.1 List the different types body repairs
   3.1.2 Explain the maintenance procedure of vehicle body

4.1.0 Understand the characteristics of paint materials
   4.1.1 Explain the different painting process
   4.1.2 Identify the components of spray painting equipments, painting booth
   4.1.3 Describe different refinishing process
   4.1.4 Explain body safety procedures

CONTENT OUTLINE

MODULE – I
Introduction – Car body construction details, major body sections of a passenger car – front section, centre section, rear section, construction types – conventional body over frame, unitised frame and body construction. Fibre reinforced and Metal reinforced body structures.

**MODULE – II**
Classification of coach work, coach and bus body styles, typical layout of bus and coach body, typical layout of commercial vehicles, vehicle body materials – steel, light alloys, plastics, textiles, glass, wood, aluminium materials, adhesives and their properties, corrosion and their prevention

**MODULE – III**
Hand tool study, power tool and equipment, shop safety, minor repairs - repairing plastics, hood, bumper, fender, lid, and trim service, door, roof, glass service, passenger compartment service. Major body repair - frame repair, frame/body damage measurement, frame re-alignment

**MODULE – IV**
Paint materials, paint characteristics, refinishing process - paint removal, preparing bare metal, prime coat selection, final sanding, masking, surface cleaning. Spray guns, equipment and material preparation, spray gun setup, spray booth.

**TEXT BOOK**

Body repair technology for 4-wheelers

James E Duffy CENGAGE LEARNING DELHI

**REFERENCES**

1. Vehicle body engineering: Pauloski
2. Auto care manual: Paul Browne
3. Body engineering: S F Page
4. Vehicle body layout: John Fenton