

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

TIME SCHEDULE

MODULE	TOPICS	PERIODS
1	Introduction – car body construction and styling forms	18
2	Classification of coach work, Vehicle body materials	18
3	Vehicle body repairs and maintenance	18
4	Painting and re-finishing process	18
	Total	72

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 bodysections
 - 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 re-inforced and Metal re-inforced 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
DELHI

James E Duffy CENGAGE LEARNING

REFERENCES

1. Vehicle body engineering
- 2 Auto care manual
- 3 Body engineering
- 4 vehicle body lay out

: Pauloski
Paul Browne
S F Page
John Fenton