

COURSE TITLE	: CHASSIS SERVICE LAB
COURSE CODE	: 426
COURSE CATEGORY	: A
PERIODS/WEEK	: 4
PERIODS/SEMESTER	: 72
CREDITS	: 2

CONTENT OUTLINE

1. Dismantling of clutches – different types – coil spring and diaphragm spring – single plate, multiplate etc. Study the parts and their function, assemble it and adjust it – refit it to the vehicle by using clutch aligns. Clutches of 2 wheelers and 3 wheelers, tractors, trailers and tillers.
2. Dismantling different types of gearboxes – and over drive, sliding mesh, constant mesh and synchromesh progressive type etc. Study different parts and their functions Calculate gear ratios, Assemble and refit it to the vehicle
3. Dismantle the universal joint and propeller shaft – study the slip joint and universal joint refit to the vehicle.
4. Dismantle the differential assembly – study the purpose and working of differential – assemble and adjust back lash.
5. Dismantle the front axle and transaxle – replace king pin and bushes – study the parts – check the alignment of the axle and refit
6. Dismantle different types of rear axles – full floating, semi floating, and 3/4 floating – study
7. Study different type suspension systems by dismantling and assembling – dismantle rigid spring type and torsion bar type. Dismantle the Mac Pherson strut type – assemble and refit to the vehicle
8. Dismantle leaf spring – adjust the camber and refit – study the shock – absorbers of different types
9. Identification of steering linkages – dismantle worm and roller type, recirculating ball type, rack and pinion type etc. Adjust steering play. Checking and adjusting of wheel alignment
10. Dismantle the hydraulic brakes system including master cylinder, wheel cylinders, brake shoes, retracting spring etc. Assemble the system and bleed the brake and adjust. Study the different units of vacuum serve and air brakes units and their functions.
11. Study different tools and accessories of brake re-lining machine, removing old lining and re-line with new lining materials
12. Removal of tyre and tube. Testing, vulcanising, filling air and refitting of tyre
13. Checking the braking efficiency of a vehicle
14. Cleaning and servicing of a vehicle in a service station
15. Familiarize with greasing points of various vehicles

16. Driving practice – Able to drive and test the vehicle