

Minnesota State College Southeast

AUTO 1114: Suspension & Steering Lab

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: *.*

Lab Hours/Week: 6

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course will develop skills the student will need for diagnosis and replacement and alignment of suspension systems needed in the technology of automotive and light duty truck repair. (Prerequisites: AUTO1105, AUTO1106, AUTO1204 or instructor approval) (3 Credits: 0 lecture/3 lab)

B. COURSE EFFECTIVE DATES: 04/27/1998 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. General Suspension and Steering Systems Diagnosis
2. Steering Systems Diagnosis and Repair
3. Suspension Systems Diagnosis and Repair
4. Wheel Alignment Diagnosis, Adjustment, and Repair
5. Wheel and Tire Diagnosis and Repair

D. LEARNING OUTCOMES (General)

1. Perform safety procedures
2. Rotate tires
3. Repack wheel bearings
4. Complete final exam
5. Service spindle and steering knuckle
6. Diagnose steering column problems
7. Service steering column components
8. Service ball joints
9. Replace steering wheel
10. Service stabilizer bar
11. Service control arms
12. Test power steering pump
13. Service power steering pump
14. Service recirculation ball power steering gears
15. Replace steering gear assemblies
16. Service linkage type power steering unity
17. Service conventional tie-rod ends
18. Complete mid-course exam
19. Service power rack and pinion steering gear
20. Service torsion bars
21. Perform tire and wheel balance
22. Perform off car computer wheel balance
23. Service idler arm
24. Identify steering angles
25. Replace coil springs
26. Rebuild McPherson strut cartridge
27. Service modified strut assemblies
28. Replace McPherson strut cartridge
29. Perform two wheel alignment
30. Perform total 4 wheel alignment
31. Exhibit professionalism

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted