## **Course Name: Automotive Tech III**

## Course #: 723 Grades: 10 – 12 Level: 0 Sem: 5X Credits: 2.5

## Prerequisites: Automotive Tech I/II

**Course Description:** Auto III is a continuation of Auto I and Auto II where students will apply technical and practical knowledge they have achieved. Individual and group skills will be utilized to reach a common goal. Students are given the opportunity to bring personal automobiles to auto shop for diagnosing and repairing. There also will be a greater emphasis on computerized automotive systems. This course contains 9 units.

Course Standards: NJ CCCS Standard 8 Technology 8.2.12.A.1, 8.2.12.B.3, 8.1.12.F.2

**Course Proficiencies:** The following is a list of proficiencies the students are expected to know and be able to perform as a result of successfully completing this course.

- 1. Know all emergency exits.
- 2. Describe employment opportunities in the automotive field.
- 3. Describe skills needed to be an automotive technician.
- 4. Describe the ASE certification program.
- 5. Explain the different types of service manuals.
- 6. Explain how to use computer-based service information.
- 7. Use scan tool data stream values to find problems.
- 8. Diagnose wheel-bearing problems.
- 9. Diagnose suspension problems.
- 10. Service a strut suspension system.
- 11. Diagnose/Repair electronically controlled suspension system.
- 12. Adjust both worm gears and rack-and-pinion gears.
- 13. Remove/Replace rack and pinion gear.
- 14. Disassemble/Reassemble rack and pinion gear.
- 15. Service disc brake and drum brake system.
- 16. Bleed brake system.
- 17. Describe anti-lock brake operation.
- 18. Describe operation of traction control system.
- 19. Describe operation of stability control system.
- 20. Describe parts of an automotive computer.
- 21. Explain input sensors.
- 22. Explain output device classification and operation.

Assessment: The evaluation of student achievement in this course is based on the following:

- 1. Tests are given at the end of the course. These generally require one to two periods to complete.
- 2. Performance based assessments to assess student demonstration of skills are included within each unit.
- 3. Class work will be efficient with safe use of time demonstrated each period.