Auto IV

Course Number: 7240
Prerequisite – Auto III

Course Description
In Auto IV, greater stress is given to performing individual skills and knowledge of ability to of students to solve problems collectively and independently. An emphasis will placed upon individual projects. Students may select projects suited to their own needs; such as rebuild cylinder heads , overhaul brake system. They may work independently or in groups. Projects will be planned as to the time constraints of class period and length of course. This course is oriented to students performing maintenance and repair on their own and others vehicles. This course will also introduce the student to advanced methods used to troubleshoot difficult vehicle problems. This course contains three units.

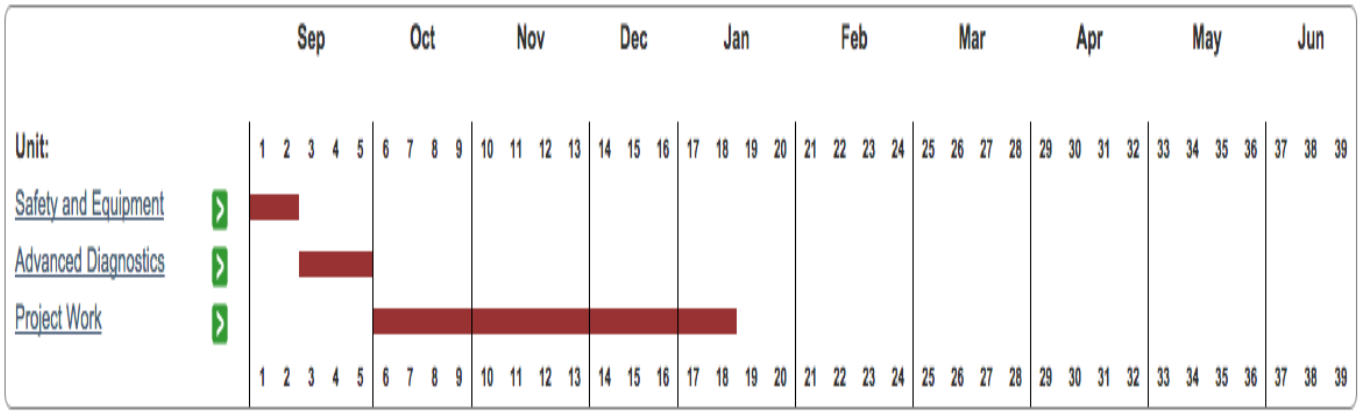
Course Proficiencies:
The following is a list of skills that the student will be proficient in at the end of course.
Students will be able to:

1) Demonstrate use of advanced automotive diagnostic techniques.
   NJCCCS 8.12.A.2, 8.2.12.B.1
2) Use scan tool data stream to locate problems.
   NJCCCS 8.12.A.2, 8.2.12.B.1
3) Apply learned knowledge to individual problems.
   NJCCCS 8.12.A.2, 8.2.12.B.1
4) Develop skills with tools and machinery of the automotive industry.
   NJCCCS 8.12.A.2, 8.2.12.B.1
5) Develop an awareness of cooperation, tolerance and appreciation in their social relationships.
   NJCCCS 8.12.A.2, 8.2.12.B.1
6) Promote the ideal safety attitude in operation of any machine or vehicle.
   NJCCCS 8.12.A.2, 8.2.12.B.1
7) Develop skill and accuracy in auto diagnostics.
   NJCCCS 8.12.A.2, 8.2.12.B.1
8) Develop a consistent and logical procedure to solve troublesome automotive problems.
   NJCCCS 8.12.A.2, 8.2.12.B.1
9) Exercise knowledge on how the automotive industry affects the individual and nation.
   NJCCCS 8.12.A.2, 8.2.12.B.1
10) Develop a basis for vocational and recreational opportunities in the automotive field.
    NJCCCS 8.12.A.2, 8.2.12.B.1

Assessment
A variety of evaluation tools will be used to assess student achievement including any or all of the following:

… Project Work
… Teacher evaluation of safety procedures
… Teacher evaluation of performance
… Test and quizzes
… Homework

Course Pacing Guide



Course Outline

Unit I – Review of Auto Shop Safety / Power Tools / Equipment

1) Layout of Auto Shop
2) How to prevent shop accidents
3) General Auto Shop Safety Rules
4) ASE test question on power tools / equipment

Unit 2 – Advanced Diagnostics

1) Use advanced diagnostic techniques to solve car problems
2) Use scan tool
3) Use strategy based diagnostic procedures
4) Use a engine vacuum gauge
5) Use a engine compression gauge

Unit 3 – Project Activities

1) Continue safe work attitude
2) Plan work projects
3) Continue proper care and use/operation of tools and equipment
4) Efficient use of materials
5) Efficient time management