Course: AUTO 114L Section(s) 01 Automotive Lab II
Credit Hours: 2

Course Description: This course gives students hands-on exposure in a shop setting to those subjects covered in AUTO-123 theory classes. Instruction utilizes a variety of mock-ups, training aids, components, and live work. The student will be able to explain and demonstrate proper safety precautions when lifting and supporting a vehicle, or using tools and equipment, or handling asbestos containing materials. Lab: 105 hours

Grading Policy
Grading: Students will earn a letter grade based on attendance, participation and final quiz.

Learning Outcomes
Upon completion of this course the student will be able to disassemble, measure, identify, repair, or replace components as necessary on gasoline engines as well as remove and replace engines. The student will also be able to diagnose and repair brake problems and various power train related malfunctions in the modern automobile.

Assessments
Achievement of these outcomes will be measured by the successful completion of assigned projects, grades given on live work projects, safety and shop practices, performance tests, and attendance as identified in the syllabus.

Attendance Procedure
Attendance is mandatory and directly affects your grade for each course.

Definition: TARDY
The student has arrived in the class or lab room after instructor has started the class session.
2 Tardies = 1 Absence

Definition: ABSENCE
The student is not present in the class or lab room for any reason, except for school authorized events. Students arriving in class/lab 15 minutes or more minutes late are considered to be absent.

Definition: PROBATION
A formal written statement informing the student of their below standard level of performance, possible consequences, and what they need to do to correct it.
You will be placed on probation if your cumulative grade average drops below a “C-” (1.75)

Absences cannot normally be made up, except in certain lab situations with instructor permission and proper supervision. Extended illness or emergency situations will be dealt with on an individual basis, with the school counselor being involved if necessary.

You will be allowed to miss1 (one) day of class for each credit of a course you are enrolled in. Each additional absence will take 5 points off of your final course grade average.
Expected Outcomes
Assessment of Outcomes: Students will demonstrate achievement of outcomes as evidenced through the following:

1. Measured through reflective assignments and projects
2. Measured through class participation/presentation
3. Measured through a final quiz

General Education Abilities
Demonstrates the ability to recognize the elements of design, the unifying element, the context, the purpose, and the effect of artistic creations.
You will discuss in class the various considerations involved in the design of the automotive body and chassis. Especially with regard to how that design impacts visual effect, sales, mechanical functionality, and the cost of the vehicle.

Demonstrates the ability to recognize, send, and respond to communications for varied audiences and purposes.
You will be required to write on automotive work orders what you have found with regard to the customer complaints, the problems found, and the repairs done. You will also learn to prepare resume’s, cover letters, and general job application materials.

Demonstrates the ability to analyze and evaluate information and arguments, construct a well-supported argument, solve problems in multiple contexts individually and collaboratively.
You will be required to answer questions in class regarding the theory of operation of various automotive systems, the types of failures that can occur, and the symptoms that arise from those failures. You will also have to determine what is the best way to repair the vehicle; balancing the nature of the repair and the ability of the customer to pay.

Demonstrates the ability to recognize key ideas, achievements, issues, diverse cultural views and events, on local, national, and global levels.
You will discuss in class the major laws and events in automotive history and the impact those laws have had on the cost of vehicles, their design, and the overall effect on customer safety and health. You will also be required to discuss the various aspects of working with other employees of diverse cultural backgrounds, genders, and nationalities.

Demonstrates the ability to access information for a given need, and to utilize a set of integrated research skills.
Throughout the program you will be using factory and after market technical manuals, as well as computerized information retrieval systems, to access information related to the repair and maintenance of automotive systems.

Demonstrates the ability to apply mathematical and scientific reasoning to investigate and to solve problems.
You will continually be required to demonstrate your ability to test, measure and evaluate the condition of automotive components and systems.

Demonstrates awareness of the relationships that exist between the individual and social groups and/or private/public institutions, the nature and ethics of these relationships, and the
responsibilities and consequences that result from changes in these relationships. You will be required to discuss and write about the relationships between you and other employees on the job, as well as be able to discuss your part in the overall operation of an automotive repair business. Issues of safety, honesty, and appropriate work ethics will be a part of those discussions.

Demonstrates the ability to apply what one knows, believes, and understands toward developing an empathetic and analytical understanding of others’ value perspectives. You will be required to consider and discuss your work as an automotive technician from the perspective of a shop owner, as well as from the perspective of customers. You will become aware of their fears, perspectives and expectations.

Required Materials
Tools and tool box will be required according to the minimum required tool list. Appropriate clothing and protective leather boots or work shoes must be worn to work in the lab. Safety Glasses.

Chapters 4-6, 12, 57-60, 69, 70, 75-79

Method of Course Delivery
This course will be delivered in a lab setting. Students will be working on vehicles, components, and mock-ups to give them hands on experience to apply concepts learned in AUTO 123 theory class.

Course Schedule
This course is taught from 10:30 a.m. to 2:50 p.m. Monday through Thursday for 8 weeks.