Tom P. Haney Technical Center Automotive Service Technology 1 & 2 Course Syllabus



<u>COURSE</u>: Automotive Service Technology 1 & 2

 INSTRUCTOR :
 Joe Nelson
 850-767-5500 Ext. 212-3403

 Building 6-614
 nelsopj@bay.k12.fl.us

Office Hours: 7:30am – 3:00pm **Lab Hours:** Mon. – Fri. 7:45am – 1:45pm Lunch – 10:15am – 11:15am

<u>COURSE TITLES</u>: Automotive Services Assistor, Automotive Steering and Suspension Technician, Automotive Brake System Technician, Automotive Electrical and Electronic Technician, Automotive Engine Repair Technician, Automotive Engine Performance Technician, Automotive Air conditioning Technician, Automotive Automatic Transmission repair Technician, Automotive Manual Transmission Repair Technician.

<u>COURSE TERM</u>: Enrollment will take place during 3 scheduled periods throughout the year and exit will take place according to student progression.

COURSE DESCRIPTION:

Automotive Service Technology prepares students for employment and/or specialized training in the automotive industry. This program also provides supplemental training for persons previously or currently employed in the automotive industry.

TABE required scores are: Reading 9.0 / Math 10.0 / Language 9.0 Basic skills remediation may be required as indicated by the TABE (Test of Adult Basic Education). TABE test <u>must be</u> taken within six weeks of your start date.

TEXTBOOKS/HANDOUTS:

<u>Textbook:</u> Automotive Service 5th Edition – Gilles ISBN-13: 978-1-3051-1059-5 <u>Lab Manual:</u> Automotive Service 5th Edition – Gilles ISBN-13: 978-1-305-26182-2 <u>Shop Manual</u>: Modern Automotive Technology – Goodheart Willcox ISBN-13: 978-1-63126-378-1

TOOLS / SUPPLIES:

Students must have their own safety glasses, shop uniforms, oil resistant shoes or boots, calculator, Digital Multi Meter, headphones, classroom supplies (pen, paper, and notebook) on a daily basis. Basic hand tools are provided. Student's acquisition of tools during the first year of training is (HIGHLY) recommended.

HOW YOU ARE MEASURED (GRADES):

OCP A (AST1 only): 50% Competency/Performance Evaluation (Hands-On Lab Work) 20% Evaluation (Employability Skills Rubrics) 30% Final: Course Completion Exams, Competency/Performance Exams. (Mindtap/Canvas)

OCP B – OCP E:

40% Competency/Performance Evaluation (Hands-On Lab Work)

15% Evaluation (Employability Skills Rubrics)

30% Final: Course Completion Exams, Competency/Performance Exams. (Mindtap/Canvas) 15% ASE Testing (A series ASE Industry Tests)

NUMERICAL EQUIVALENT OF GRADES:

90-100 = A 80-89 = B 70-79 = C 60-69 = D0-59 = F

HOW THE COURSE IS TAUGHT:

The course is taught using competency-based and individualized instruction, videos, textbooks, computer-assisted instruction, hands-on learning, and instructor demonstrations.

MAJOR COURSE OBJECTIVES:

Automotive Service Technology focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the automotive industry:

- 1. Operation and theory of the following : Introduction to Automotive, Electrical, Engine Performance, Engine Repair, Brakes, Suspension, Automatic Transmission, Manual Transmission and Drive Train, Heating and Air Conditioning
- 2. Planning, management and finance in automotive industry
- 3. Technical and product skills
- 4. Underlying principles of technology
- 5. Labor, community, health, safety and environmental issues
- 6. Computer, critical thinking, technical writing and research skills

STRATEGIES:

- 1. Attend classes, completing book and computer assignments along with laboratory work
- 2. Complete reading and homework assignments
- 3. Study/maintain handouts
- 4. Read current publications from the automotive industry.

PROGRESS:

Proceed at your own pace using the handouts, instructional videos, computers and textbooks. Complete mastery of an area must be achieved before proceeding further. Each assignment must be signed off on the student's course outline by the instructor before proceeding any further. Students are responsible for maintaining a sufficient rate of progress through the course, consistent with individual student ability.

LECTURES:

Formal class lectures are presented and you will be notified of the schedule. Impromptu and informal lectures are also given.

LAB SHEETS:

Student must demonstrate an understanding theory of operating principles prior to starting lab sheets. Have the instructor or lab assistant sign and verify your lab sheets after completing each lab assignment. Turn in your lab sheets to the instructor or lab assistant for grading and recording.

CONFERENCES AND ASSISTANCE:

You are welcome and encouraged to come to our office to talk over any problems you may have in this course. Students needing assistance with problems will research along with the instructor all possibilities and utilize all reference materials to achieve a solution. Automotive problems can be presented to the class as a whole for research upon instructor's approval. Class interaction and discussion concerning automotive diagnostics is encouraged.

STUDENT RESPONSIBILITIES:

Students are expected to understand and follow all school rules and policies. Students are responsible for class, lab, shop, and equipment care. Students are responsible for maintaining proper industry work habits and conduct. Students must read and sign automotive technology regulations upon entrance to program. Shop cleanup is the responsibility of all students and will be conducted on a weekly basis. Students are responsible for all fees. Program cost is approximately \$6,400.00 for complete 1800 hours with supplies.

EXAMINATIONS:

The course examinations consist of written knowledge examinations and performance evaluations. A knowledge examination is given upon completion of each assignment on the course outline. If you take

the Final Exam and score less than 80%, you are allowed to retake that exam, after you take advantage of the opportunity to study the material. Instructor's observation grades are assessed in accordance with posted Classroom and Employability Rubrics. Students are encouraged to take the nationally and industry recognized Automotive Service Excellence (ASE) exam upon completion of each automotive area.

ATTENDANCE:

Individual class hours/days will be arranged with the instructor. You are expected to be on time and dressed in accordance with school policy. You may want to keep a personal log of your weekly time. If you are a full-time day student, and you know you are going to miss time during the week, please notify your Instructor. Students are only allowed to miss a max of 10% of their scheduled hours per pay period, and excused hours can only be a max of 8% per pay period. Entry to class in excess of 10 minutes past the published start time will result in an absence for that block of instruction.

WITHDRAWAL:

A student desiring to withdraw from a course of study must do so by the deadline published in the student handbook. If you have any questions concerning withdrawal procedures, please see the instructor.

CLASS BREAKS:

There are no scheduled breaks for CTE programs. The only break during the scheduled day is lunch. When students are not on their lunch break, they are expected to be working on OCP related tasks.

LAB STATION EQUIPMENT:

The equipment you will use is rugged and reliable. However, with abuse or misuse, it will malfunction and become inoperable. Be careful and have the instructor/instructional aide demonstrate the use of the equipment before using it for the first time. Read all instructions carefully and ask questions prior to use. Keep your lab bench work area <u>clean and orderly</u> while performing assignments. Return all equipment/lab components to the proper storage area before departing at the end of the day. Lab and shop will be clean and secured at the end of each project or day--whichever comes first. If a lab assignment will take more than one day, notify the instructor and secure all parts and project at the end of the day.

RETAKE OF COURSE:

This course is subject to updates due to industry requirements. Students will be required to retake courses if acquired credit is five years old or by authorization of instructor.

SAFETY: REMINDER!

- Masks are required while you are on Campus at all times
- Safety Glasses are required any time you are in the shop area

- Safety is priority <u>one</u>. Make learning safe, fun and enjoyable!
- Report any unsafe conditions to the instructor immediately!
- If you are not comfortable or confident with any repair, stop and notify the instructor.
- Everyone must complete the Automotive Safety (PAS) videos and worksheets prior to working in the shop.
- Automotive technology regulations must be read and signed by student upon entrance to program.
- Complete safety and security manual is available in instructor's office.
- Please take note of the safety rules and regulation board and all of its contents.
- Safety Glasses, Safety Glasses, Safety Glasses!!!