# Tom P. Haney Technical College

## Automotive Service Technology 1 & 2 Course Syllabus



COURSE: Automotive Service Technology 1 & 2

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

Building 6-614 <u>nelsopj@bay.k12.fl.us</u>

Office Hours: Lab Hours:

6:30am – 2:00pm Mon. – Fri. 7:15am – 11:45pm

<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, Automatic Transmission and Transaxle Technician, Manual Transmission and Transaxle Technician, Automotive Heating and Air Conditioning Technician.

**COURSE TERM:** Enrollment will take place during <u>3</u> scheduled periods throughout the year and exit points 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 **must be** taken within six weeks of your start date.

## **TEXTBOOKS/HANDOUTS:**

<u>Textbook/Lab Manual Bundle:</u> Automotive Service 6<sup>th</sup> Edition – Gilles ISBN-**13: 978-0-3570-8178-5** Shop Manual: Modern Automotive Technology – Goodheart Willcox ISBN-**13: 978-1-63126-378-1** 

#### **TOOLS / SUPPLIES:**

Students <u>must</u> have their own safety glasses, shop style 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 (<u>HIGHLY</u>) recommended. Student tool boxes will be inventoried <u>daily</u> before being secured in the tool room.

## **HOW YOU ARE MEASURED (GRADES):**

## **OCP Percentages:**

50% Competency/Performance Evaluation (Hands-On Lab Work)

20% Evaluation (Employability Skills Rubrics)

30% Final: Course Completion Exams, Competency/Performance Exams. (Mindtap/Canvas/ASE)

## **NUMERICAL EQUIVALENT OF GRADES:**

90-100 = A

80-89 = B

70-79 = C

60-69 = D

0-59 = 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 led demonstrations.

#### **MAJOR COURSE OBJECTIVES:**

Automotive Service Technology 1 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 Repair, Electrical Repair and Diagnosis, Engine Repair, Brake System, Suspension.
- 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 will take the nationally and industry recognized Automotive Service Excellence (ASE) exam upon completion of each automotive area.

## **ATTENDANCE**:

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**.

#### 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.

#### 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 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--<u>whichever comes first</u>. **Each work bay will be swept and then mopped after each use**. If a lab assignment will take more than one day, notify the instructor and secure all tools, parts and project supplies 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 more than five years old or by authorization of instructor.

## **SAFETY: REMINDER!**

- Safety Glasses are required any time you are in the shop area, no exceptions.
- 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 SP/2 content in MindTap prior to working in the shop.
- Automotive Technology regulations must be read and signed by student upon entrance to program.
- Please take note of the safety rules and regulation board and all of its contents.
- Safety Glasses, Safety Glasses!!!