



COURSE SYLLABUS

Technical Basics for the Automotive Professional

John F. Kennedy High School

Fall 2016

Instructor: James Ben Ballenger

E-mail: Ben-Ballenger@scusd.edu

Location: Room E-2

Instructor Office Hours: Mon-Fri 4:30 – 5:00 pm Room E-2

Prerequisite: None

Course Description:

This course presents theoretical and practical training for entry-level automotive technicians. It presents basic automotive diagnosis and service procedures used in automotive shops. Lab projects performed in an automotive shop environment provide hands-on experience with industry shop tools. Shop service operations which meet Automotive Service Excellence (ASE) standards including safety, electrical, and other general automotive procedures are covered. Course will also cover other Mechanical Technician career paths, including but not limited to industrial machines and forklifts.

Required text:

Automotive Service, Inspection, Maintenance, Repair 3rd Ed

Tim Gilles

ISBN #10:1-4180-3758-3

Book provided and stored in the automotive classroom

Required Materials:

- **Safety Glasses/Goggles (Z87 Rated)** (one set will be provided)
- Enclosed Shoes (Oil Resistant Preferred) (**NO OPEN TOES**)
- Paper & Pencils – Pens and three ring binder.

Course Overview:

To prepare students for entry-level employment in the automotive industry and other related technical fields. Over-all knowledge required to own/maintain a personal vehicle and preparation for post-secondary education. Shop operation, shop safety and work ethics will be important aspects of this class. These objectives can be met in a safe and professional environment for all.

Level 1 students will learn shop safety and the proper use of tools and shop equipment commonly found in the automotive industry. This class uses a college curriculum and offers course credit for AT100 at American River College.

Level 2 (advanced class) will build upon the prior year of training with greater detail in instruction and increasingly challenging hands-on activities.

Course Objectives:

Upon completion of this course, the student will be able to:

- Demonstrate safe use of tools and equipment.
- Perform basic service operations and problem-solving techniques.
- Evaluate service and repair methods according to industry and ASE-approved standards.
- Demonstrate accurate measurement techniques.
- Apply modern service procedures vital to the automotive industry.

Shop and Classroom Procedures:

Every class session will begin and end in the classroom. The student will be expected to be seated in his/her assigned seat ready to work when the class bell rings. Students will be seated in alphabetic order. Students who are not present in their seat at the end of class will be marked as absent. The daily lecture or shop tasks will be announced shortly after attendance is taken. All rules and regulations found in the Kennedy High School student handbook will be enforced.

Attendance:

Student attendance will be critical to the success of this course. Students needing to make up missed lab activities or classroom tests will need to schedule with the instructor for a make-up. Only excused absences, cleared within three days will be eligible for a make-up. The student is 100% responsible for contacting the instructor for coursework make-up.

- Tardiness will be handled according to school policy.
- Truancies will be followed up with a parent/ legal guardian contact.
- Students who miss more than 6% of the course hours will not receive college credit for the course.

Participation:

Student participation is needed to obtain a passing grade in the course. Not attending class is not participating in the course. Participation points will be assigned with a deduction for every day a student does not participate in the course.

Behavioral Expectations:

Auto shop is an industrial environment and requires a higher level of maturity. If used improperly; tools and automotive chemicals can cause bodily harm. No hazardous actions will be tolerated. Students will not be permitted to disrupt the class or the learning of others. The instructor will resolve behavioral issues based upon the severity of the misbehavior. Students who have serious or continuous behavioral problems will be referred to the school administration for resolution. The rules in auto shop are firm to protect students from harm and enhance the learning opportunities for the better good of the class.

Constructive Participation in the Learning Process:

- Have respect for others
- Be on time and prepared to learn with the appropriate materials
- Be alert and actively participate
- Follow directions
- Be respectful during instruction
- Respect property of the shop and that of others
- Do not bring inappropriate objects to class
- Abstain from food, drinks and gum
- Grades will be earned not given

Clothing and Eye Protection:

Clothing worn in the shop will from time-to-time receive damage from grease and other automotive fluids. It is recommended that the student store “shop clothes” in the shop locker, which will be assigned by the instructor. Many shop activities will not be performed in shorts or other non-protecting clothes. Wearing non protective clothing to shop is discouraged highly and the use of “cover-alls or Lab Coat” is encouraged. The instructor reserves the right to bench a student from an activity when inappropriate clothing is worn. Absolutely no open toed shoes in the shop.

Protection of the eyes is of the highest importance. The shop does have face shields available to the students; however, the use of **safety glasses (Z87 rated) is required**. Students will receive one set of safety glasses and will be responsible for replacing damaged or lost glasses. The instructor will cover the topic of eye protection in class.

Electronics Policy:

No personal electronics will be allowed or used in the classroom. (Example: Phones of any kind, Tablet Computers, Head Phones, Etc.). Stolen, lost or damaged personal electronics will not be investigated.... keep your personal electronics at home. These devices create a distraction in the learning process and a safety hazard. See the electronics policy in the student handbook. Shop computers will not have any student software or applications downloaded. School computer and electronics policy will be strictly enforced.

Safety Test:

Students are required to pass the shop safety test. Students who do not complete the on line safety test will be placed in another course.

Required Text:

Course text will be provided for in-class use and will be stored in the shop. Students can borrow the text only after filling out a textbook loaner card with the instructor.

Grading:

In class participation, quizzes, tests, shop assignments and shop cleanup will be compiled to define grades. Grades below 80% will not receive college credit for the course.

Grading scale:

90% to 100% for an A

80% to 89% for a B

70% to 79% for a C

60% to 69% for a D