

Automotive Course Outline

Grade 10 Power Mechanics, All schools Semester 1, Turtle River School Division

Teacher: Mr. Johnston Email: ljohnston@trsd.ca

Course Overview:

1. Intro to Workplace Health and Safety, rights and responsibilities, WHMIS, PPE
2. Tools. Equipment, Materials, and Documentation
3. Tires and Hubs

No prerequisites required

Resources:

To cover all the required areas for this course we will be studying specific chapters and doing review and ASE type questions with the textbooks provided by the school, as well as the use of Electude on the laptops. Other resources include my donated vehicle and personal vehicles the students would like to work on.

Supply List:

Notebook, pencil case with all required utensils

Rules and Expectations:

1. Respectful language and behavior to peers and the teacher
2. Listening to the person talking and do the instructions given by the instructor for the daily task without attitude
3. Come prepared to class with all necessary supplies
4. No cellphone use will be permitted, unless the laptops are unavailable and they can be used for research purposes only. Students will have 3 warnings, after the third warning the cellphone will be held in my desk until the end of class.
5. Always handle tools and equipment with care and respect

Assignment Guidelines:

Assignments are to be handed in on the due date I assign. Students can have extra time to finish any assignments during the due date class if they were absent or it does not interfere with the assignment or project that day.

Late assignments will appear as zero until they are completed and handed in. If a student or students continuously hand in late assignments the parents, or parent will be notified.

No tolerance for plagiarizing, if caught the student will receive a zero and will have to re-due the assignment.

Students that miss classes and fall behind will receive some assistance from me to help them catch up to the pace of the rest of the class, but will have to try their best on their own as well and not rely solely on my help.

Units of Study:

1. Learning About Work **6%**

Outcomes: Describe structure and scope of the Automotive Service Technician trade.

Duration: 7 hours **Theory**

2. Tools, Equipment, Materials, and Documentation **47%**

Outcomes:

- a) Identify hazards and describe safe work practices pertaining to the use of tools and equipment.
- b) Describe hand tools, power tools, and specialized test equipment, and procedures for their use.
- c) Describe and demonstrate measuring tools and procedures for their use.
- d) Identify types of fasteners, fittings, tubing and hoses, and describe their applications and procedures for use.
- e) Describe and demonstrate the procedures used when operating, inspecting, maintaining and storing hoisting and lifting equipment.
- f) Identify and interpret identification codes found on the vehicle and vehicle components.
- g) Identify types of trade related documents and describe their applications.
- h) Describe the procedures used to prepare and/or complete trade related documents.

Duration: 28 hours, 14 will be **Practical** and 14 will be **Theory**

3. Tires Wheels and Hubs **47%**

Outcomes:

- a) Define terminology associated with tires, wheels and hubs.
- b) Identify hazards and describe safe work practices pertaining to tires and wheels.

- c) Identify types of tires and describe their construction.
- d) Identify types of tools and equipment relating to tires, wheels and hubs and describe their applications and procedures for use.
- e) Identify types of wheels and describe their construction.
- f) Identify types of hubs and bearing assemblies and describe their components and operation.
- g) Identify types of tire pressure monitoring systems (TPMS).

Duration: 28 Hours **Practical** 14 hours **Theory** 14 hours

All three units will come to an overall mark out of **100%**

Assessment Guidelines:

- Teacher to student understanding, see how the student is learning the information and how it is being processed to allow the teacher to modify further instruction in the future.
- Student to teacher goals and self-confidence to develop determination to better themselves as a student.
- Final grades and marks for students will be a direct reflection of the end result of the students understanding of that specific unit of study and its outcomes and goals.

Evaluation:

Evaluation will be done using rubrics and checklists as follows

1. Teacher evaluation (how instruction is taken and applied to daily projects)
2. Peer evaluation (teamwork capability)
3. Individual evaluation (growth as an individual student)