

Renfrew Collegiate Institute

TTJ

Transportation Technology

Teacher: Mr. Ferguson (*ferguson@rcitech.ca*)

Class: Room 191

COURSE DESCRIPTION

This course requires students to study a cross section of Transportation Technology topics, including the vehicles and support systems needed to move people and goods. Students will gain insight into these areas through practical, hands-on experience with vehicle service, as well as research projects and industry visits. Additionally, students learn about the analysis, design, and construction of a system to convert and make practical use of energy; the function of major vehicle system components, the impact of transportation systems on the environment, measurement systems and methods, and transportation-related careers.

UNITS OF STUDY

Introduction: Safety & Legislation
Unit 1: Evolution of Transportation
Unit 2: Vehicle Maintenance
Unit 3: Power and Control Systems
Unit 4: Future of Transportation

PROJECTS

Major Projects	1. Automobile Divisions Summary 2. Electric Car 3. 4-Stroke Engine 4. Personal Projects 5. Recumbent Bicycle 6. Portfolio (Culminating)
Minor Projects	1. Equipment Use Certification 2. Electromagnet and Motors 3. Project Reports

STUDENT EVALUATION

During the semester the following format will be used as a basis for evaluation:

Term	15% Knowledge and Understanding [<i>tests (written/practical), quizzes, and content of assignments</i>] 15% Inquiry [<i>shop skills, shop design, shop report questions</i>] 20% Applications [<i>practical projects, personal projects, class projects, all hands-on work</i>] 20% Communication [<i>log sheets, reports, portfolio</i>] Interdisciplinary Product 20% Projects 10%
Term 1	35%
Term 2	35%
Final Exam	<u>30% (15% Culminating Assignment 15% Exam)</u> 100%

Formative marks — To maximize formative marks (*i.e., Learning Skills Inventory Marks*), a student should:

- be polite, co-operative and have a strong work ethic, bring all required materials to every class
- participate openly in class discussions — show initiative and teamwork
- regularly present solutions verbally or on the board
- have excellent attendance and arrive on time, ready to go — be organized
- pay careful attention during lessons and have homework completed