



Ancaster High School
Course Outline 2013/2014
Transportation Technologies
Grade 11 TTL3C
Technological Education



TEACHER: Mr. M. Sampson

PREREQUISITE: None

HOURS: 220

CREDIT VALUE: 2

DEPARTMENT HEAD: Mr. K. Lemieux **TEXTBOOK:** From The Ground Up Aircraft Sheet Metal

GUIDELINE: *The Ontario Curriculum Grades 11 and 12, Technological Education, 2009 Revised*

The text will be provided free of charge. However, the student is responsible for returning the book in reasonable condition. The student will be charged for loss or damage.

**A. TRANSPORTATION TECHNOLOGY
FUNDAMENTALS**

OVERALL EXPECTATIONS

By the end of this course, students will:

- A1.** demonstrate an understanding of the fundamental principles of engines and their service, repair, and maintenance;
- A2.** demonstrate an understanding of basic electrical and electronic circuits and their components;
- A3.** identify the function and explain the operation of the major systems and components of vehicles, aircraft, and/or watercraft;
- A4.** demonstrate accurate and appropriate use of technical and mathematical knowledge and skills in the study of transportation technology.

**B. TRANSPORTATION TECHNOLOGY
SKILLS**

OVERALL EXPECTATIONS

By the end of this course, students will:

- B1.** demonstrate an understanding of engine operation and repair by performing a variety of service operations;
- B2.** demonstrate the ability to test and repair basic electrical circuits safely and correctly;
- B3.** demonstrate the ability to service and repair steering/control, suspension, brake, and body systems;
- B4.** develop appropriate solutions to transportation technology challenges and/or repair problems.

**C. TECHNOLOGY, THE ENVIRONMENT,
AND SOCIETY**

OVERALL EXPECTATIONS

By the end of this course, students will:

- C1.** demonstrate an understanding of environmental issues related to the use of materials and procedures in the service, repair, and recycling of vehicles or craft;
- C2.** demonstrate an understanding of the relationship between society, vehicle ownership, and various aspects of transportation technology.

**D. PROFESSIONAL PRACTICE AND
CAREER OPPORTUNITIES**

OVERALL EXPECTATIONS

By the end of this course, students will:

- D1.** demonstrate the use of professional work practices and procedures and compliance with occupational health and safety regulations and standards;
- D2.** describe career opportunities in the transportation industry and the education and training required for them.

TEACHING STRATEGIES (include, but not limited to):

- Providing appropriate accommodation for students on IEP's and for English Language Learners and for those who are First Nations, Metis or Inui;
- Utilizing Student Support and Student Alternative Support Programs;
- Contacting parents for support and assistance;
- Using diagnostic assessment and check-in points to monitor student progress;
- Providing differentiation of instruction and assessment to meet the needs of diverse learners;
- Providing ongoing descriptive feedback that is clear, specific, meaningful, and timely to support improved student learning;
- Creating lessons, and assessment and evaluations, that are carefully planned to relate to the curriculum expectations and learning goals, and as much as possible to the interests, learning styles and preferences of all students;
- Developing students' self-assessment skills to enable them to assess their own learning, set specific goals, and plan next steps for their learning.

ASSESSMENT AND EVALUATION OF WORK:

Assessment and evaluation will be based on the provincial curriculum expectations and the achievement levels outlined in the curriculum policy document. Students will be given numerous and varied opportunities to demonstrate their achievement of the expectations across the four categories of knowledge and skills.

Midterm and final marks will be calculated using the prescribed learning strands with the following weighting:

Strand	Weighting
Fundamentals	20
Skills	30
Technology, The Environment, and Society	10
Professional Practice and Career Opportunities	10

Evidence of achievement can be determined from a variety of sources, including but not limited to: in-class assignments, class presentation, open-ended questions, observations, quizzes, unit tests, investigations, projects, conversations, portfolios, anecdotal records, self-assessments, etc. Not every assessment will count towards a student's final grade. The primary purpose of assessment and evaluation is to improve student learning.

CULMINATING ACTIVITY

Culminating activities occur at or near the end of a course. They form part of the final 30% of a student's mark. If a student is absent from a culminating activity, they must provide a doctor's note. The culminating activity will not normally be re-scheduled.

For this course, the culminating activity will occur: TBA

And will consist of the following: TBA

