

## Course Outline: Technological Design and the Environment, Grade 11

**Teacher:** Mackenzie

**Credit Value:** 1.0

**Course Code:** TDJ 301

### Course Description:

This course enables students to apply a systematic process for researching, designing, building, and assessing solutions to address specific human and environmental challenges. Through their work on various projects, students will explore broad themes that may include aspects of industrial design, mechanical design, architectural design, control system design, and/or apparel design. Students will develop an awareness of environmental and societal issues related to technological design, and will learn about secondary and postsecondary pathways leading to careers in the field.

Curriculum Strands:	Units of Study:
Design Process	Unit 1: Importance of Failure in Design
Models and Prototypes	Unit 2: Speaking the language of Design
Representing Design Ideas	Unit 3: Design, problem solving and the Environment
Technical Drawings	Unit 4: Careers and pathways
Career Opportunities	

### Assessment & Evaluation:

<b>Term Work:</b>	<b>70%</b>	<b>Final Summative:</b>	<b>30%</b>
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**Within each Curriculum Strand, the following Achievement Chart Categories will be used for individual evaluations:** Knowledge/Understanding, Thinking/Inquiry, Communication, Application

**Learning Skills and Work Habits:** The following Learning Skills and Work Habits are evaluated regularly using a scale of Excellent, Good, Satisfactory or Needs Improvement:

- Responsibility
- Organization
- Independent Work
- Collaboration
- Initiative
- Self-Regulation

**Growing Success:** Students will be assessed through a combination of conversation, observation, and product. Success criteria, exemplars and ongoing descriptive feedback will be used to support student learning. Assessment will be varied in nature, and administered over a period of time to provide multiple opportunities for students to demonstrate the full range of their learning. The final grade should reflect the student's most consistent level of achievement, with special consideration given to more recent evidence. (*Growing Success, 2010*)

**Teaching Strategies:** A variety of teaching and learning strategies will be incorporated throughout the course.