



COURSE OUTLINE 2019-2020

Course Name:	Exploring Technologies	Course Code:	TIJ101
Course Type:	Grade 9 Open	Credit Value:	1.0
Teacher(s):	Ms. G. Humphries		

Course Description:

This course enables students to further explore and develop technological knowledge and skills introduced in the elementary science and technology program. Students will be given the opportunity to design and create products and/or provide services related to the various technological areas or industries, working with a variety of tools, equipment, and software commonly used in industry. Students will develop an awareness of environmental and societal issues, and will begin to explore secondary and post-secondary education and training pathways leading to careers in technology-related fields. This course will also emphasize the use of several different design-oriented computer software applications such as AutoCad and Softplan, as well as Photoshop.

<http://www.edu.gov.on.ca/eng/curriculum/secondary/teched910curr09.pdf>

Course Overall Expectations:

Strand	Overall Expectations
Technology Fundamentals	A1. demonstrate an understanding of the fundamental concepts and skills required in the planning and development of a product or service, including the use of a design process and/or other problem-solving processes and techniques; A2. demonstrate the ability to use a variety of appropriate methods to communicate ideas and solutions; A3. evaluate products or services in relation to specifications, user requirements, and operating conditions.
Technological Skills	B1. use problem-solving processes and project-management strategies in the planning and fabrication of a product or delivery of a service; B2. fabricate products or deliver services, using a variety of resources.
Technology, the Environment and Society	C1. demonstrate an awareness of the effects of various technologies on the environment; C2. demonstrate an awareness of how various technologies affect society, as well as how society influences technological developments.
Professional Practice and Career Opportunities	D1. follow safe practices and procedures when using materials, tools, and equipment; D2. identify careers in various technological fields, and describe the educational requirements for them.

Assessment and Evaluation Strategies:

The purpose of assessment and evaluation is to improve student learning. Assessment and evaluation is based on the provincial curriculum expectations and the achievement levels outlined in the curriculum document. In order to ensure that assessment and evaluation are valid and reliable, and that they lead to the improvement of student learning, teachers use a variety of strategies throughout the course, including: providing students with feedback about their work (known as assessment for learning), helping to set learning goals and monitor their own progress (known as assessment as learning), and evaluation and reporting of progress in the form of grades and marks (known as assessment of learning).

Unit Overview	Assessment and Evaluation Methods (Will also include Major assignments, which will be indicated for each unit when assigned)
Technology in Society - students are introduced to the concepts of Technology and invention/innovation, and examine ways both impact our daily lives (social, economic, environmental, etc.)	Research report, oral and digital presentation
The Design Process – an examination of the Design Process itself and how it is used as a problem-solving and planning tool in good design Google Sketchup – students learn the basic tools of the online 3D modelling software, Google Sketchup. This also provides the necessary framework for their final design in the Course Culminating activity.	In-class assignments, test/quizzes Sketchup exercises, final Sketchup assignment
Pixlr – an introduction to some of the basic tools of Pixlr commonly used in Digital Photography editing	Pixlr exercises, final Pixlr assignment
Engineering & Structures – students examine basic Structural Engineering principles and how they impact different kinds of structures around us in our everyday lives	Test/quizzes, Model Bridge project
Careers in Technology – an examination of the many different jobs/careers in Technology and the necessary skills/educational requirements for them	OSP research assignment, brochure presentation
Independent Study - Independent Study project due mid-January	10%
Course Culminating Activity - Architectural Design Project	20%

Assessment and Evaluation Categories and Weights:

Achievement Chart Categories		Evaluation/Weight of Marks	
Achievement Category	Percentage	Evaluation	Percentage
Knowledge/Understanding	14%	-Independent Study Project	10%
Thinking/Inquiry	14%	-Final Summative Project	20%
Communication	14%		
Application	28%		

Learning Skills and Work Habits Assessment:

The development of learning skills and work habits is an integral part of student learning. These skills are:

- **Responsibility**
- **Organization**
- **Independent Work**
- **Collaboration**
- **Initiative**
- **Self-regulation**

Learning skills and work habits influence student achievement and are included as a formal part of the assessment and evaluation process. Learning skills and work habits will be assessed through a variety of teacher strategies. (e.g. observation, student /teacher conference, self-reflection, checklists, exit cards, etc.) These important learning skills and work habits will be formally reported on the Provincial Report Card according to the following scale: E- Excellent, G- Good, S- Satisfactory, N- Needs Improvement.

Academic Dishonesty - Cheating and Plagiarism:

Learning tasks that students complete, as well as all assignments, tests and exams which students submit for evaluation must be their own work. Cheating and plagiarism is a serious offence which will not be condoned. Academic consequences will result.

Late and Missed Assignments - Student Roles and Responsibilities

Students are expected to:

- be responsible for providing evidence of their achievement of the overall expectations within the time specified by the teacher, and in a form approved by the teacher;
- understand that there will be consequences for not completing assignments for evaluation and/or for submitting those assignments late;
- use class time productively;
- in extenuating circumstances, request an extension from the teacher before the due date.

Mark deductions for late and missed assignments may apply to Major assignments only.

References: *TVDSB Assessment & Evaluation Policy*, September 2011; *Growing Success - Assessment and Evaluation, and Reporting in Ontario Schools*, 2010.
Student Planner and School Web site