



Glendale Secondary School

Technological Education Department Course Outline 2015/2016
Technological Design, Grade 12 College/University Preparation TDJ4M



TEACHER:

PREREQUISITE: TDJ3M

HOURS: 110

CREDIT VALUE: 1

DEPARTMENT HEAD: Ms. K. Ciprietti

TEXTBOOKS: In-class Reference Use Only

REQUIRED MATERIALS: 3-ring Binder & Pen

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

The text will be provided without charge. The student is responsible for returning the book in reasonable condition. The student will be charged for lost or damaged books. **Textbook replacement cost:** N/A

COURSE DESCRIPTION:

This course introduces students to the fundamentals of design advocacy and marketing, while building on their design skills and their knowledge of professional design practices. Students will apply a systematic design process to research, design, build, and assess solutions that meet specific human needs, using illustrations, presentation drawings, and other communication methods to present their designs. Students will enhance their problem-solving and communication skills, and explore career opportunities and the postsecondary education and training requirements for them.

STRANDS and OVERALL EXPECTATIONS:

The Strands are as follows:

Theory and Foundation.

The key ideas about concepts, components and systems, materials, services, and products.

Skills and Processes.

The technological skills and processes required for responding to a variety of practical challenges.

Impact and Consequences.

Safety-related issues, career opportunities, and the implications of technology.

Overall Expectations:

A. Theory and Foundation

1. Apply engineering principles and appropriate formulas to design work.
2. Demonstrate the ability to interpret technical reference materials and test data.
3. Describe manufacturing or construction techniques used in architecture, engineering, or industrial design.
4. Solve engineering problems in a team environment.
5. Identify suitable ways of communicating their design ideas.

B. Skills and Processes

1. Produce effective design briefs and technical reports, and create freehand illustrations and traditional or computer-aided drawings that conform to industry standards.
2. Fabricate effective models and displays of student-developed products.
3. Perform structural and material tests correctly.
4. Estimate the cost of labour and materials for a project.
5. Evaluate project solutions.

C. Impact and Consequences

1. Identify ethical issues related to engineering design.
2. Handle materials and tools safely.
3. Assess project solutions in terms of safety, efficiency, ergonomics, and the environment.
4. Describe careers in engineering, architecture, or industrial design and the educational requirements for each.

(Curriculum documents, with all overall and specific expectations are available at: <http://www.edu.gov.on.ca/eng/curriculum/secondary/>)

The primary purpose of assessment and evaluation is to improve student learning

ASSESSMENT

The process of assessing student learning is continuous and on-going. Teachers use information gathered through assessments to provide feedback for students, to guide instruction and develop individual learning goals for students. This is assessment *for* learning. Students use this feedback to continuously improve their achievement and set individual learning goals. This is assessment *as* learning. Information from assessments informs the teacher's professional judgment, but is not used in determining the student's level of achievement.

EVALUATION

Evaluation is the process of determining a level of student achievement of the Overall Expectations for a course, which is recorded as a mid-term or final grade on a report card.

Students will be given numerous and varied opportunities to demonstrate their achievement of the Overall Expectations across the four categories of achievement (Knowledge & Understanding, Thinking, Communication and Application). Evidence of student achievement of the Overall Expectations is collected over time from three different sources – observations, conversations and student products.

To be successful students **must demonstrate achievement of EACH of the Overall Expectations** for the course. If a student is missing evidence of achievement of one or more of the Overall Expectations then a lower limit will be determined by the teacher.

In determining a report card grade teachers use their professional judgment to interpret the evidence of student achievement which reflects the student's most consistent level of achievement with special considerations given to the more recent evidence.

The final grade is determined by the following breakdown:

70 % - evaluations made at the end of units throughout the semester.

30% - final demonstrations of learning (culminating activities and/or final examinations)

REPORT CARDS

Student progress is reported at 3 times during the semester.

Interim Report – October and March. Reports on student Learning Skills and Work Habits with next steps for improvement.

Mid-term Report Card – November and April. Reports on student achievement of the Overall Expectations to date. **Incomplete achievement** is reflected on Mid-term Report Cards, but replaced when learning has been demonstrated.

Final Report Card – February and July. Reports on student achievement of all of the Overall Expectations.

ACADEMIC HONESTY

Students are responsible for being academically honest in all aspects of their schoolwork. Academic dishonesty includes a variety of behaviours including cheating, plagiarism, facilitating or aiding academic dishonesty, and the unauthorized access or manipulating of student records, work and computer programs. Such behaviours impede the learning process and threaten the educational environment for all students. Intentional academic dishonesty will result in disciplinary consequences. Teachers and parents should support students in striving for excellence and producing work with integrity.

ATTENDANCE AND LEARNING SKILLS

There is a direct link between good attendance and success at school. Students are expected to attend classes regularly and on time. Evidence of student achievement is gathered during classes through observations and learning conversations.

Learning Skills play an important role in a student's level of achievement. Students will be assessed on the following learning skills: responsibility, organization, independent work, collaboration, initiative, and self-regulation.

CELL PHONES/PERSONAL ELECTRONIC DEVICES

Teachers will determine when personal electronic devices, including cell phones, will be used as instructional tools/supports. At other times these devices (with the exception of electronic translators) are not to be used and must be turned off and be stored away. Consequences for inappropriate use of these devices may include removal of the device from the learning environment.

SCHOOL WIDE SUPPORTS

- ☺ Student Support Team (formerly know as Learning Resource)
 - In-class help
 - Test and exam support
 - Alternate learning environment
- ☺ English Language Learner Support Team
 - Lunch-time help
 - Test and exam support
- ☺ Math lunch-time help
- ☺ Math Homework Help – on-line support
- ☺ Information via school website @ <http://schools.hwdsb.on.ca/glendale/>
- ☺ School wide access to password protected wireless network
 - Access to on-line resources
- ☺ Literacy Coaching
- ☺ Literacy @ Lunch
- ☺ Learning Commons @ Lunch
- ☺ Paper and electronic calendars
- ☺ Teacher/department Lunch-time/before/after school help



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I am aware of the course expectations and the policies and supports put in place for the student to be successful.

Student's Name: _____

Teacher's Name: _____

Contact Number: 905-560-7343

Email: _____

Department Head Name: Ms. K. Ciprietti

Contact Number: 905-560-7343 ext. 259

Email: kcipriet@hwdsb.on.ca

Parent/ Guardian Signature: _____

Date: _____

Student Signature: _____

Date: _____
