

Glendale Secondary School Technology Department Course Outline

TEJ2O Computer Technology, Grade 10, Open



TEACHER: Mr. Tait PREREQUISITE: None HOURS: 110 CREDIT VALUE: 1

DEPARTMENT HEAD: Ms. Ciprietti

TEXTBOOK: None REQUIRED MATERIALS: Regular classroom materials

GUIDELINE: The Ontario Curriculum Grades 10 to 12 Computer Studies

COURSE DESCRIPTION: This course introduces students to computer systems, networking, and interfacing, as well as electronics and robotics. Students will assemble, repair, and configure computers with various types of operating systems and application software. Students will build small electronic circuits and write computer programs to control simple peripheral devices or robots. Students will also develop an awareness of related environmental and societal issues, and will learn about secondary and postsecondary pathways and career opportunities in computer technology.

STRANDS and OVERALL EXPECTATIONS:

A. COMPUTER TECHNOLOGY FUNDAMENTALS

- I. identify and describe the functions of, as well as important advances related to, electronic and computer components;
- II. demonstrate a basic understanding of computer networks and their components;
- III. demonstrate a basic understanding of binary numbers and digital logic.

B. COMPUTER TECHNOLOGY SKILLS

- I. install and configure the hardware and operating system of a workstation, and use file management techniques effectively;
- II. construct and test simple interfaces and other electronic circuits;
- III. assemble and configure a simple computer network;
- IV. install and use a variety of software;
- V. apply fundamental programming concepts to develop a variety of simple programs, including a program to control an external device.

C. TECHNOLOGY, THE ENVIRONMENT, AND SOCIETY

- I. identify harmful effects of the widespread use of computers and associated technologies on the environment, as well as agencies that reduce these effects;
- II. identify effects of the widespread use of computers and associated technologies on society.

D. PROFESSIONAL PRACTICE AND CAREER OPPORTUNITIES

- I. follow appropriate health and safety procedures when assembling, using, and maintaining computer systems;
- II. demonstrate an understanding of ethical and security issues related to the use of computers;
- III. identify various careers related to computer technology, and describe the education and/or training required for them.

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

Mid-term Report Card –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 – 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)
 - o 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 Lunchtime/before/after school help