# St. Marcellinus Secondary School - DPCDSB



## **COURSE OUTLINE**

Course Code: ICS20

**Course Name:** Grade 10, Introduction to Computer Studies

**Teacher:** Mrs. C. Manoil

**Textbook:** none, course notes provided by the teacher

This course introduces students to computer programming. Students will plan and write simple computer programs by applying fundamental programming concepts, and learn to create clear and maintainable internal documentation. They will also learn to manage a computer by studying hardware configurations, software selection, operating system functions, networking, and safe computing practices. Students will also investigate the social impact of computer technologies, and develop an understanding of environmental and ethical issues related to the use of computers.

#### A. PROGRAMMING CONCEPTS AND SKILLS - OVERALL EXPECTATIONS

By the end of this course, students will:

- describe the functions of different types of hardware components, and assess the hardware needs of users;
- describe the different types of software products, and assess the software needs of users;
- use the basic functions of an operating system correctly;
- demonstrate an understanding of home computer networking concepts;
- explain the importance of software update

### **B. SOFTWARE DEVELOPMENT - OVERALL EXPECTATIONS**

By the end of this course, students will:

- describe fundamental programming concepts and constructs;
- plan and write simple programs using fundamental programming concepts;
- apply basic code maintenance techniques when writing programs.

#### C. COMPUTER ENVIRONMENTS AND SYSTEMS - OVERALL EXPECTATIONS

By the end of this course, students will:

- describe key aspects of the impact of computers and related technologies on society;
- describe computer use policies that promote environmental stewardship and sustainability;
- describe legal and ethical issues related to the use of computing devices;
- describe postsecondary education and career prospects related to computer studies.

Prerequisite: none		
My signature below indicates that I have read the Course Handout, and I am in agreement with its contents.		
Parent's/Guardian's Signature:	Date:	

# **Units of Study:**

Unit 1: Computer Systems (10)
Unit 2: Intro to Programming (15)
Unit 3: Variables & Data Types (15)
Unit 4: Flow Control- Decision (15)
Unit 5: Flow Control- Repetition (15)
Unit 6: Computer/Humanity/Earth(4)
Unit 7: Ethics and Issues in IT (5)
Unit 8: Computer Careers (3)
Review and Final Evaluation (8)

## **Student Expectations:**

- The computer/ media equipment shall be used for the express purpose of education.
- Students must like solving problems
- Students must be willing to work in groups and on their own as per situation
- Plagiarism of any kind will result in a mark of 0 in all categories
- If a student cannot explain their code, or pseudo-code, the assignment will be considered plagiarized.
- All assignments must be submitted in the form of source code. Complied binaries will not be accepted.
- All assignments will follow appropriate course naming and documentation conventions.
- Be positive, timely, inquisitive, and willing to be challenged. Respect yourself, others and the lab.
- Students will be given ample time in which they can plan and execute their solutions in class. The use of a home computer is not necessary for successful completion of this course.

# **Course Grade Weighting:**

1. **Student marks** will be determined by evaluating process & product according to 4 categories:

Term Work: 70%		Final Evaluation: 30%	
Category	Weight	Task	Weight
Knowledge and Understanding	25%	Culminating Assessment	15%
Thinking	25%	Final Exam	15%
Communication	20%		
Application	30%		

2. Feedback will also be provided for student **learning skills**. Working independently, teamwork, organization, work habits/homework, and initiative are assessed apart from student achievement in the four categories outlined above and will conform to the coding:

E – Excellent G – Good S – Satisfactory N - Needs Improvement

- 3. Each unit will conclude with a **Unit Test or Summative Task**. Any examination or test missed due to truancy will not be rescheduled, and will be assigned a mark of zero." Students missing an evaluation for a legitimate reason must provide a note from a parent/guardian that acknowledges that the parent is aware that a scheduled assessment has been missed.
- 4. **Assignments** will be assigned each class. If you have difficulty with any course work, it is **YOUR** responsibility to seek extra help as needed. Please do not hesitate to ask for help so that you do not get too far behind!
- 5. If you **miss a class** for any reason, you are responsible for the work and any assignment done during that class. Any handouts distributed will be kept in the classroom for you to pick up.

May God bless your efforts. Welcome to the Class!