INTRODUCTION TO PROGRAMMING
York Region District School Board
Dr. G.W. Williams Secondary School

Teacher: Mrs. F. Piruzza-Gibbons

Grade	Name	Type	Code	Credit Value	Prerequisite
11	Introduction to Programming	College	ICS3C	1.0	None

Course Description:

This course introduces students to computer programming concepts and practices. Students will write and test computer programs, using various problem-solving strategies. They will learn the fundamentals of program design and apply a software development life-cycle model to a software development project. Students will also learn about computer environments and systems, and explore environmental issues related to computers, safe computing practices, emerging technologies, and postsecondary opportunities in computer-related fields.

Course Materials:

1. The Ontario Curriculum document, Grades 10 to 12, Computer Studies, 2008
2. Textbook: An Introduction to Programming Using Microsoft Visual Basic 2008
3. YRDSB MOODLE: MRS. GIBBONS ICS3C1

Course Content:

UNIT	UNIT TITLE	OVERALL EXPECTATIONS
1	Computer Environments and Systems	• demonstrate an understanding of the functions of different types of computer components; • use appropriate file maintenance practices to organize and safeguard data; • use a software development environment to write and run computer programs.
2	Software Development	• use a variety of problem-solving strategies to solve different types of problems; • design software solutions to meet a variety of challenges, using a set of standards; • design simple algorithms according to specifications; • apply a software development life-cycle model to a software development project.
3	Programming Concepts and Skills	• demonstrate the ability to use different data types in expressions in simple computer programs; • demonstrate the ability to use control structures and simple algorithms in computer programs; • use proper code maintenance techniques and conventions when creating computer programs.
4	Computers and Society	• describe computer use policies that promote environmental stewardship and sustainability; • describe and apply procedures for safe computing to safeguard computer users and their data; • explain key aspects of the impact that emerging technologies have on society; • describe postsecondary education and career prospects related to computer studies.

Assessment and Evaluations:

Assessment and evaluation of student achievement are based on the provincial curriculum expectations and the *Achievement Chart for Computer Studies*. The achievement chart identifies *four categories* each with *four levels* of achievement. Throughout the semester, we will provide you with various opportunities (e.g., tests, quizzes, case studies, exercises, assignments, projects, homework checks, oral presentations, and computer lab work) to demonstrate your achievement of the curriculum expectations across all four categories. Achievement at Level 1 will earn a mark of 50 – 59%, Level 2 is 60 – 69%, Level 3 is 70 – 79%, and Level 4 is 80 – 100%. Level 3 is the provincial standard. Students who are achieving at least level 3 (i.e. 70+ %) are well prepared for work in the next grade. Additionally, you will receive regular feedback from your teacher that will come in the form of direct, corrective comments, or in the form of grades or levels.

Your **final mark** will appear on the report card as a percent. It is policy that 70% of your final mark will be based on assessments that occur throughout the term and 30% will be based on the final summative assessments that occur towards the end of the course. The components of your final mark are shown in the chart on the back of this page.

Assessment, instructional and environmental **accommodations** are provided to individual students as per their ***IEP***. Similarly, **adaptations** for **English Language Learners** are provided based upon the student's level of language development, strengths and needs.

Learning Skills:

Responsibility, Organization, Independent Work, Collaboration, Initiative, Self-Regulation – will also be assessed regularly throughout the semester. Learning Skills must be assessed separately from your achievement of the expectations in this course. They will not be used in the calculation of your final mark.

Marking Structure:

TERM EVALUATION	Knowledge/ Understanding	Addresses the ability of the student to recall facts, terms, definitions, concepts, ideas, theories, principles, relationships, and methodologies.	20%	70%
	Thinking	Addresses the ability of the student to demonstrate critical and creative thinking in unfamiliar contexts, often beyond the classroom environment. This includes evaluation of business situations, problem solving, decision making, detecting bias, and effective research.	15%	
	Communication	Addresses the ability of the student to communicate concepts both orally and in writing, using effective presentation tools. This includes effective expression and organization of ideas, communication for different audiences, and use accounting vocabulary and terminology with effectiveness.	15%	
	Application	Addresses the ability of the student to transfer their knowledge and understanding of concepts to new and familiar contexts.	20%	
SUMMATIVE	Final Examination	There will be a Final Exam at the end of the semester worth 15% of the student's final evaluation. All students will write the final exam, which will be based on the entire semester's work.	15%	30%
	ISU	The ISU will reflect the student's knowledge and understanding of key concepts learned in the course.	15%	

Instructional Approaches:

Students learn best when they are engaged in learning in a variety of ways. Computer studies courses lend themselves to a wide range of approaches in that they require students to discuss issues, solve problems, plan solutions, participate in the development of solutions, conduct research, think critically, and work cooperatively. It is important, that students have opportunities to learn in a variety of ways – individually, cooperatively, independently, with teacher direction, through hands-on experience, and through examples followed by practice.

Attendance:

It is expected that students will attend class, be punctual, and follow the attendance and punctuality policy outlines in the student agenda book. Being present and on time helps to build a richer learning environment and are integral to a student's success in the course.

Late Submission Policy:

Students are responsible for submitting work to teachers on time. If a student anticipates a problem with meeting a deadline then the student is required to initiate a discussion with the teacher in advance. When a deadline has been missed, a mark of zero (0) will be assigned. In such a case, the student and teacher will discuss a plan about meeting the related curriculum expectations and replacing the mark of zero. A parent/guardian will be included in the discussion, as warranted. Any exception to this policy will be made in consultation with the Principal.

Department Expectations:

It is expected that you will:

1. Arrive on time for class
2. Bring proper equipment (notebook, textbook, pen, pencil, eraser, calculator etc.)
3. Listen attentively and take proper notes
4. Participate – give answers orally, ask questions, help others
5. Tell your teacher in advance if you know you are going to be away
6. Get caught up with your notes and assignments if you are absent
7. Do your homework regularly
8. Come in for extra help when you need it
9. Keep an open mind – each semester is a fresh start and a new opportunity
10. If you are absent for an evaluation, see your teacher the day you return to class and be prepared to do it that day. For a prolonged absence, discuss possible options with your teacher. Our insistence that you meet these expectations will give you the best possible chance to measure your progress in business.

Academic Integrity:

Learning is enhanced when students think independently and honestly. True learning in an intellectually stimulating environment is enhanced when students consistently demonstrate respect for the intellectual property rights of others and adhere to a code of honour in all evaluated activities. Acts of academic dishonesty can lead to severe consequences for students. Please refer to the student agenda book for definitions, procedures and consequences.

Extra Help:

To maximize your performance, it is essential that you keep up with your understanding. Come in for extra help when you need it**.** Arrangements for extra help can be made with your teacher.

Teacher/Department Head Contact Information:

Teacher:	Mrs. F. Piruzza-Gibbons	Depart. Head:	Mr. Robert Pileggi
Email:	frances.piruzza-gibbons@yrdsb.ca	Email:	robert.pileggi@yrdsb.ca
Phone:	905-727-3131 ext. 429	Phone:	905-727-3131

Parent's Signature: Date:

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