	St. Matthew High School Grade 11 Introduction to Computer Science ICS3C	

Teacher: Mr. M. Brash
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www.brash.ca/ics3

Prerequisite Course: None.

Description and Overall Expectations: 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 post- secondary opportunities in computer-related fields..

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.

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.

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.

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.

Course Resources: The course website (www.brash.ca/ics3) will have links to all course resources, lessons, and assignments. Students will require access to a computer with Internet connection to complete assignments and homework. The computer being used ***does not need to be high-powered*** and can be running any operating system. While ***students are encouraged to bring their own device***, the classroom has computers for student use.

Catholic Graduate Expectations: Our goal for all students is to experience an education based on our Catholic Graduate Expectations. We work in community to develop graduates that are:
● Discerning Believers Formed in the Catholic Faith Community
● Effective Communicators
● Reflective and Creative Thinkers
● Self-Directed, Responsible, Life-Long Learners
● Collaborative Contributors
● Caring Family Members
● Responsible Citizens (www.iceont.ca)

Assessment, Evaluation and Reporting: The primary purpose of assessment and evaluation is to improve student learning. Students will understand what is expected of them, using learning goals, and success criteria, based on the overall expectations. Feedback (self, peer, teacher) supports learning, and plays a critical role in academic achievement and success.

The development of learning skills and work habits is a key indicator of future success. The following learning skills and work habits will be developed, assessed, and reported during this course:

1. Responsibility   fulfills responsibilities and commitments *(e.g. accepts and acts on feedback)*
2. *Organization*   manages time to complete tasks and achieve goals *(e.g. meets goals, on time)*
3. Independent work   uses class time appropriately to complete tasks *(e.g. monitors own learning)*
4. Collaboration   works with others, promotes critical thinking *(e.g. provides feedback to peers)*
5. Initiative   demonstrates curiosity and an interest in learning *(e.g. sets high goals)*
6. Self-Regulation   sets goals, monitors progress towards achieving goals *(e.g. sets, reflects goals)*

Group work supports collaboration, an important 21st century skill. This will be assessed only as a learning skill. Homework may also be assessed as a learning skill. Evaluation completed in class will be based only on individual student work. Regular attendance is important to support group work, various forms of feedback, and to allow students to demonstrate evidence of their learning. Students are responsible for providing evidence of their own learning (with references where required), in class, within given timelines. Next steps in response to academic integrity issues, such as lack of work completion, plagiarism, or other forms of cheating, range from providing alternate opportunities, to a deduction of marks.

The achievement chart identifies four levels, based on achievement of the overall expectations:

Level 1   achievement falls below the provincial standard   (50-59%)
Level 2   achievement approaches the provincial standard   (60-69%)
Level 3   achievement is at the provincial standard   (70-79%)
Level 4   achievement surpasses the provincial standard   (80-100%)

The report card grade will be based on evidence of student performance, including observations, conversations and student products. Consideration will be given to more recent evidence (skill development) and the most consistent level of achievement.

Mark Breakdown:

Term Work (70%) will include a variety of assessments designed to demonstrate students' development in their knowledge and understanding, thinking and inquiry, communication and application of all overall expectations.

Summative evaluation (30%) takes place towards the end of the semester, is completed in class, and provides the final opportunity for students to demonstrate what they know, and the skills they have learned, based on the overall expectations. In Introduction to Computer Science 3C, the summative evaluation will consist of a rich summative assessment task (30%).

Awarding of Course Credit: Students who demonstrate evidence of achievement of overall expectations, **and** earn a mark of 50% or greater, will earn one credit for the course with the following exception:

Students who do not complete their summative evaluation (exam and/or end of year summative task) will not earn their credit regardless of their mark.