

# COMPUTING SCIENCE 20 COURSE OUTLINE

Salisbury Composite High School

August 2015

Teacher: D.G. MacCarthy

[www.salcomp.ca/eteachers.php?teacher=334&page=786](http://www.salcomp.ca/eteachers.php?teacher=334&page=786)

## Overview

Computing Science at Salisbury aims to develop in students an understanding of computers as tools for solving computational problems. Students will be introduced to Computing Science as an academic discipline and will learn to write code using various programming and mark-up languages; these may include Python, Java, Processing, JavaScript, JSON, XML, HTML and CSS.

As a CTS pathway, Computing Science 20 is offered as a collection of 1-credit courses. Students are expected to complete at least 5 credits over the semester. The courses that each student will complete will depend on student interest and aptitude, future plans, and successful completion of pre-requisites. The scheduled offerings for this semester are listed below and may be subject to change depending on the individual needs of the students.

CSE 2140: 2nd Programming Language 1

CSE 2120: Data Structures 1

CSE 2130: Files & File Structures 1

CSE 3110: Iterative Algorithm 1

CSE 1240: Robotics Programming 1

CSE 2240: Robotics Programming 2

The Program of Studies is available from the Alberta Education website. A link may be found on the course website which can be accessed from the teacher's eTeacher page.

## Assessment

The purposes of assessment include: improving student learning, guiding effective instruction, and providing information for

reporting of student achievement. Achievement is assessed with respect to the course objectives and achievement standards published by Alberta Education.

With these goals in mind, **all** student assignments are subject to assessment. For Computing Science, this may include practice assignments, programming or mark-up language coding tasks, projects, quizzes and examinations. The type and number of assessments will vary between courses within the pathway.

Assessment includes both formative and summative tasks, meaning that not all assessment results will necessarily be used in calculating a student's course grade.

## Required Equipment

Students must maintain their EIPS network account in good standing to have access to the school computers. Students will normally not be permitted to use their own computers during class, as non-EIPS computers can only connect to the school network in a very limited manner.

Students will require a set of headphones as some lessons may include multimedia content to be played on the computers. Students will also require a USB drive that they can use to transfer their work between home and school, and on which they are to back-up their work in case of accidental erasure. Alternatively, an account with a cloud-based service such as Dropbox or Google Drive can be used for transfer and back-up.