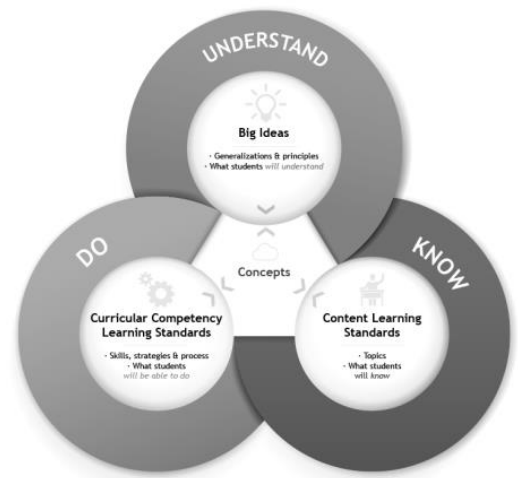




COURSE OUTLINE

Computer Programming 11/12



SUBJECT/GRADE: Computer Programming 11/12

TEACHER: Christoph Schaub

CONTACT INFORMATION: Christoph.Schaub@sd68.bc.ca

WEBSITE: www.theschaub.ca

ONGOING PROGRESS UPDATES:

- Up to date assessment will be available on the MyED portal and students individual websites
- There will be a minimum of two formative reports communicated to parents throughout the semester. These will be accompanied by student self-assessments.
- One formal parent-teacher-student conference will be scheduled (date to follow)
- One summative report at the end of the semester

COURSE OVERVIEW

Computer Programming 11/12 is an introduction to those interested in computer programming. Although this class requires no previous programming experience, students are expected to have experience working with computers and have a moderately-strong math background. Students will be introduced to various programming techniques and learn the core logic behind computer programming. The language that will be primarily used this year is C#. With permission from the teacher, those who have prior experience in programming or computers may work on self-directed programming / computers projects instead.

BIG IDEAS

- The design cycle is an ongoing reflective process.
- Personal design choices require self-exploration, collaboration, evaluation, and refinement of skills.
- Tools and technologies can be adapted for specific purposes.

CONTENT

- Design opportunities, strategies, and the design cycle
- Programming language constructs to support input/output, logic, decision structure, and loops
- Requirements of a problem statement and transforming requirements into algorithms
- Translation of design specifications into source code
- Tools to aid in the development process
- Pre-built libraries and their documentation
- Inline commenting to document source code
- Use of test cases to detect logical or semantic errors
- Computational thinking processes

CORE COMPETENCIES

A Core Competency is a skill that all learners need to have to be successful in all aspects of their life. There are 3 core competencies: Communication (Communicating & Collaborating), Thinking (Critical Thinking, Creative and Reflective Thinking), Personal (Personal Awareness and Responsibility, Social Awareness and Responsibility and Positive Personal and Cultural Identity).

ASSESSMENT PLAN

Course Evaluation

Quizzes	30%
Assignments	30%
Projects	40%

Materials:

Each student will require: 3-ring binder, lined note paper, pen, pencil, eraser and ruler.

Assessment:

1. **Student Self – Assessment and Reflection**
2. **On Going - Formative**

Minor Assignments and Classwork

- Worksheets, projects, labs and reading assignments may be marked to assess current understanding of topics being studied.
- Usually self-marked

Homework and Application

- There is generally no homework in Computers unless class time has been missed or not used effectively.
- Students are responsible for completing all work assigned while absent from class.

3. **Summative**

Projects, Tests & Quizzes

- Each unit will end with either a summative test, project, or combination of the two.
- Test re-writes will occur after or before school

Lab Activities and Major Assignments

- These must be submitted on time as requested.
- Skills in making observations, problem solving, researching and expression of student understanding will be emphasized. Format and neatness will be taken into account.

Work Habits:

Excellent (E) - Always uses class time wisely.

Assignments are of exceptional quality. Strives to contribute to a positive classroom environment.

Respects science equipment and materials and is always prepared for class and ready to work. Shows interest in science topics.

Good (G) - Effective use of class time, assignments handed in on time and complete, often contributes to class/group discussions, respect of science equipment and materials, and prepared for class.

Satisfactory (S) - Mostly uses class time effectively, most assignments handed in on time and complete, sometimes contributes to class/group discussions, no misuse of science equipment and class materials, and usually prepared for class.

Needs improvement (N) - Does not use class time effectively, assignment are not handed in on time or are not complete, does not contribute to class/group discussions, misuse of science equipment and materials, and not prepared for class.

Expectations

- ✓ **Use of Class Time:** Students are expected to show up to every class ready to work. Effective use of class time is important in order to keep up as well as to utilize the help of myself and classmates.
- ✓ **Attendance:** Whenever possible students should inform me in advance of an upcoming absence so that we can arrange a time to meet and make a plan in order for the student to stay on top of their work. With exception of an illness documented by the office, students will be expected to catch up on their own time. Students will also be expected to get any notes missed during an absence from a classmate. Students who leave the classroom before being dismissed without previous arrangements with me will be marked as absent.
- ✓ **Late:** Students who are late are expected to come in quietly and find their seat without disrupting the class. If a student is late on a test or quiz day they will not be given extra time. Habitual tardiness will be addressed on an individual basis.
- ✓ **Missing Test or Quiz:** Students who were not present for a test or quiz must arrange a time with me to write a different version of the test or quiz.
- ✓ **Homework:** Students will generally have time to complete the majority of their work in the classroom. But any work not finished in class will be expected to be finished at home. Classroom work will be checked for completion and some assignments will be handed in for marks. Work will not be accepted after a unit is finished.
- ✓ **Technology:** Technology can be a great tool for learning but when it becomes a distraction, it negatively impacts students. Any technology that becomes a distraction is generally placed on the whiteboard easel for the reminder of the class.
- ✓ **Extra Help:** Extra help is always available for students who require more help. Come see me to arrange a time that works for both of us.

Respect yourself, your classmates, teachers, the classroom and materials.

