Final Assessment Programming 9-12





Section 1

Below are the technical skills and knowledge you should be able to demonstrate regardless of your course level. Please check of the item you feel that you have learned:

- 1. Understand what computer programming is
- 2. Familiar with the basic **Syntax** of one or more computer programming languages: Python, C, C++, C#, HTML, JavaScript
- 3. Understand what **variables** are, how to use them, and *list* the **different** types of variables used in popular computer programming languages
- 4. Understand the how an "if" statement works and a while loop works and how they are fundamentally different.
- 5. How to use a variable to keep track of events (how to count things)
- 6. Know how to use **For Loops**
- 7. How to use or create **timers** in computer programming.
- 8. How to do simple **algebraic functions** (calculate things)
- 9. I can create and use my **own function** in a programming language.
- 10. Understand what a **parameter** is
- 11. Know how to collect information from a user
- 12. Understand how to **display information** in a neat orderly way
- 13. How to **draw** or create images using a programming language
- 14. How to create an animation using a computer programming language.
- 15. Use **arrays** or **lists** in programming to organise, search, and recall large sets of data.
- 16. How to document your code with useful comments and a clear layout.
- Can use programming to **solve complex problems** (like the ones on the University of Waterloo contests).

In the space below please list any additional concepts you learned that you would like me know about:

Section 2

Distance Learning Work Load Expectations:

Please indicate what Level you started the course at by circling the appropriate section. Comment on if you completed the expectations for this level

Grades 9/10's

Rookies (first time in the course)



- RobotC students should have completed Level 2 of Python and...
- Also complete at least 1 assignment from Level 2.5
- Didn't work lean RobotC? see next section.

Veteran (second time in the course **OR** grade 9/10 who started the semester in Python)

- Completed all of Level 2 and all of Level 2.5 of Python
- Completing a mini Python project of your choice can substitute for one Level 2.5 assignment.



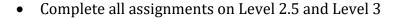
Grades 11/12's

Rookies (first time in the course):



- Complete all of Level 2
- Selected workbook questions on Level 2 site (or mini project proposal).
- First 3 assignments of Level 2.5 (Assignment#4 should be done if you want to earn a 90+)

Veterans (Second time in computer programming) or hoping to legitimately hit all the learning outcomes of the Grade 12 curriculum





Section 3

How Am I Doing?

In addition to the technical **skills** and **knowledge** you learn in Computer Programming 9-12, you are also expected use your skill and knowledge in the ways explained outlined in the chart on the **next page**



Evaluate yourself based on the criteria given and circle the colums that you believe you fall in.

	Needs improvement	Satisfactory	Great
Working with well with others?	I am not open to working with others. I rarely share my work or ask other for help.	I work with others in class. I regularly share my work, ask for help, and help others.	I share my work. I help others and they help me. I am a positive influence when I work with another individual or group. I can think of instances where I have worked together with others solve a problem.
Creating?	I am learning stuff, but not usually creating anything new. I like to ask for and follow detailed instructions regularly.	I am definitely learning. I am sometimes able to put ideas together create something new or different.	I discover and create new things in my work regularly. My work usually exceeds the expectations of a given assignment or project.
Displaying Work?	People are too busy to see my work. There have been a few projects where people did not see my work	I show my work to my classmates and Mr. Walzl only when instructed to do so.	I'm proud of my work and display it in a way that people understand. I always make sure to show my projects to classmates and Mr. Walzl. I sometimes show my work to people outside of class
Solving Problems	When I get stuck. My progress slows down.	When I get stuck I actively look for new options and solutions. I make a plan to move forward	When I get stuck, I examine all options, make a plan and follow through until the problem is solved. I am able to work with others effectively and positively while solving problems
Time and Effort	I don't always spend time in class effectively. I am off task frequently and distract others	Time spent in class is <i>always</i> affective.	Time spent in class is always affective for myself and others. I spend time outside class working on projects and problems.
Organization	I usually know what needs to be done in class and I have a rough idea of how to do it.	I know exactly what needs to be done and I have a plan of how to do it.	I always have a direction and plan for my work. Dates and events have been recorded. Work is documented so progress and quality can be examined.
Satisfaction	I work in a way that isn't always rewarding.	I work in a way that allows me to enjoy my work in class	I make an effort to enjoy each class and make it valuable for myself and others.

Section 4

Rate each statement below from 0 to 10. (Where 10 is "completely true" and 0 is "not true at all")

- 1. I worked on my coding regularly. I spent the same amount/more time doing work in this course than I did/do in Math 9-12 this year.
- 2. I did my own work. I collaborated with other students, shared my work and learned from others, but I did always made sure I authored my own code and fully understood each submitted exercise.

Answer the following:

- 1. The most challenging concept/project/assignment I did this term was:
- 2. The thing I am most proud of this term is:

Based on assignment marks, and the information filled out in all 4 sections above, I would give myself the following grade for this term (out of 100):