

EECS1012

Net-centric Introduction to Computing

Fall 2018

Lassonde School of Engineering
York University

What is this course about?

This course is an introduction to computing.

Unlike most introductory courses that focus on learning to program with a single language . . .

This course uses a web-centric approach to introduce you to a number of concepts related to data organization, markup languages, procedural programming, event handling, and the web.

When I was student . . .



- The traditional way to teach computer science was to start with basic programming concepts with a single language (e.g. Pascal, Fortran, Python, C)
- Programming is a very narrow view of the computing.
- Most students during my days didn't start to see the "big picture" until their third or fourth year. This course attempts to show you at least one "big picture" in your first semester.

Because, as with most technology

- Awesome things are built from many singular components . . .



This course will give you a *taste* of . .

- HTML & CCS
- JavaScript
- Web Forms
- Client-Server Concepts

These are the basic building blocks of the World Wide Web (WWW)!

HTML, CSS, and JavaScript . .

- HTML (and CSS) is not a programming language
 - It is a “markup language” that has many rules that are similar to programming languages
- JavaScript is a scripting language
 - JS is a full programming language
 - It can be used to dynamically update a webpage
 - Direct interaction with a webpage using the "Document Object Model" (DOM)
 - Can be used to access web servers to retrieve data

Honestly speaking . . .

- Starting you off with JavaScript is probably a **bad** idea . . .
- JavaScript is an event-driven language that responds to actions applied in an HTML page
- Many programming tasks are not event-driven
- That said, learning the basics of JavaScript and basic programming will be useful when you take other modules

JavaScript (JS)

- It is among the popular languages used in the tech industry



The 9 Most In-Demand Programming Languages of 2017

Your level of expertise after this module

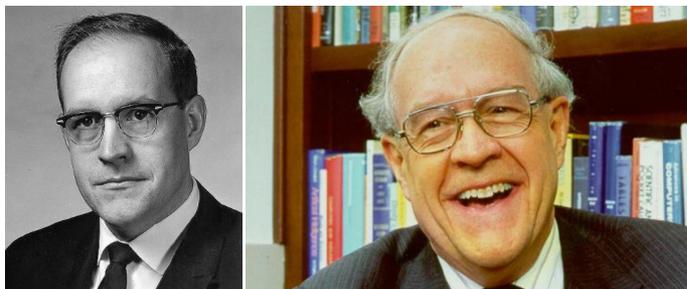
- You will not be an expert programmer after this module
 - Programming is like everything else, the more you practice the better you get
 - It just takes time . . . practice, practice, practice
- But, this module will give you a taste of what computing is like . . . and just how fast you can build cool stuff

“The programmer, like the poet, works only slightly removed from pure thought-stuff. He builds his castles in the air, from air, creating by exertion of the imagination. Few media of creation are so flexible, so easy to polish and rework, so readily capable of realizing grand conceptual structures....

Yet the program construct, unlike the poet's words, is real in the sense that it moves and works, producing visible outputs separate from the construct itself.”

[Fred Brooks](#) (1975)

[The Mythical Man-Month](#): *Essays on Software Engineering*



Your guides on this journey . .

Name: Dr. Michael S. Brown (Sections A&B)
Dr. Amir H. Chinaei (Section C)

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*** All emails need to include your student number in the subject! Please use official York email, otherwise we cannot verify who you are. ***

Brown's Office hours : 9.30-10.30am (Th), LAS3022

Chinaei's Office hours: 10:00-11:00 (TW), LAS3048

Course Structure

- Weekly lectures
 - Section A: 2:30-4:30pm (T) - VC135
 - Section B: 2:30-4:30pm (Th) - SLH D
 - Section C: 10:30am-12:30pm (M) - SLH D
- Labs (starting week 3 – Sep 17-21)
 - William Small Building
 - Rooms 106/108
- Multiple lab sessions M-F

YOU MUST ATTEND YOUR ASSIGNED LAB SESSION!

We will not use a textbook!

Instead we will use many web resources.

Moodle (moodle.yorku.ca)

- Pre-lab quizzes, lab submission, and subject matter tests will all be performed using moodle.
- Notes, additional resources, and labs will be made available at:
<https://www.eecs.yorku.ca/~mbrown/EECS1012/schedule.html>
- Grades will be posted using a google doc
 - Link will be provided after add-drop period
- **We will not use moodle to post grades!**

Class Marking scheme

• Two (2) in-class exams @ 18% each	36%
• Two (2) in-lab tests @ 20% each	40%
• Five (5) subject matter tests at @ 2% each	10%
• Seven (7) labs @ 2% each	14%
• Pre-lab quizzes required for each lab.	
	<hr/>
	100%

letter grade computed using normal table

In-class exams – mark your calendar

- In-class exams (bring a pencil)
 - Exam #1: Oct 22-26, 2018 (Week 8)
 - Exam #2: Dec 3-7, 2018 (Week 14)
- Closed book, multiple choice

NO FINAL EXAM!

Two in-lab tests

- Held during your lab session
 - Lab test #1: Oct 15-19, 2018 (Week 7)
 - Lab test #2: Nov 26-30, 2018 (Week 13)
- Lab tests will require you to write code, **on your own**, under in-lab supervision. Results will be submitted during the lab. No internet access . . . “cheat sheets” will be provided.

Subject matter tests (SMT)

- Five (5) different multiple choice tests on 'key' subject materials relevant to the course.
- Administered using Moodle.
 - 20-30 questions, multiple choice
- **SMT are pass/fail. You need to score an 80% to pass**
 - **Read this carefully. You only get full credit if you get 80% on your SMT.**
 - If you get less than 80%, you will not receive any credit for the SMT.
- You can re-take the SMT multiple times, **however, you have to wait 24 after each attempt**
 - So, start earlier and try

Labs and pre-lab quizzes

- **Pre-Lab quiz required for each lab!**
 - You will need to show the TA that you have completed the pre-lab quiz
 - The TA will only help you and mark your lab if you have completed this quiz
- Labs materials and pre-lab quizzes will posted on Moodle.
- TAs will mark your lab in class (you will demo it to them, they can ask questions – you will have to sign a). You will be asked to upload your lab files to moodle after the TA has marked your attendance.
- **You must attend your lab session (and on time).** If you are more than 30 minutes late we will consider you absent for the entire lab.
- We have over 600 students, valid absence will require medical documentation
 - <https://registrar.yorku.ca/pdf/attending-physicians-statement.pdf>

Lab and lab attendance sheets

- You are highly encouraged to try complete your lab before the lab session. The TAs can help answer any questions you may be confused on. However, you must complete the lab before your lab session is over.
- The TAs will verify the lab was completed and ask you to sign your name. **If the TA does not verify your lab and you do not physically sign the attendance sheet you cannot get credit for the lab.**

Attendance sheet

NAME	STUDENT ID	VERIFIED	STUDENT INITIAL
Michael Brown	9999998	YES	<i>MSB</i>
Amir H. Chinaei	9999999	YES	<i>AHC</i>
Aubrey Graham	9999000		
Justin Drew	9999001	YES	<i>JD</i>
Shawn Peter	9999002		

What if I miss a lab, exam, or test?

- **A valid physicians statement** is required for any labs, exams, or tests that are missed.
- We have over 600 students, the only fair way to allow for make up of any missed items (labs, exams, test) is by a valid medical statement.

See link to a physician statement here:

<https://registrar.yorku.ca/pdf/attending-physicians-statement.pdf>

Your laptop or ours?

- You are welcome to complete your labs on your own machine. However, you need to come to lab to demo your results to the TA in the lab.
- In-lab tests will be on our lab machines. You should be familiar with how to use the lab machines.

Questions?