EECS 1012: Net-Centric Introduction to Computing
Sections A & B Fall 2017

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Webpage: http://www.eecs.yorku.ca/~mbrown/EECS1012/

This is an introductory course in computer science. Rather than providing a broad overview of the discipline, this course takes a single aspect of computer science -- web-based programming -- and uses that to introduce a number of concepts related to data organization and retrieval, procedural programming and networking. Along the way it will introduce you to a number of very commonly used languages, in particular: HTML, CSS, PHP, Javascript and SQL.

This is a single term course lasting 12 weeks. A key element of the course is a set of lab exercises. These labs are supervised, in that you will do the lab in a specific location at a specific time and there will be someone there to help you work your way through the labs. You are welcome to discuss labs with a partner, but you will be marked individually and will need to submit your own solution/code to the online system (moodle). The lab will be marked by a TA before the lab session ends – so it is important that you come to your assigned lab (you cannot attend another lab session). Labs are intended to be experiential and collaborative. You are encouraged to ask for help from others, from the web, and from any other resources you may have open to you. You may also helpyour fellow student, but please make sure you learn the concepts – do not just copy to finish the lab. The labs are primarily to prepare you for an individual lab-exam where you must work independently.

Lecture notes, labs and other resources will be made available on the course webpage. However, online quizzes and lab submissions will be made using Moodle (moodle.yorku.ca). You are responsible for any and all information posted on the Moodle site.

Learning Outcomes for the course:
By the end of the course, students will be able to:

- Use a set of computing skills such as reasoning about algorithms, tracing programs, test-driven development, and diagnosing faults.
- Explain and apply fundamental constructs in event-driven programs, including variables and expressions, control structures (conditionals/loops), and API usage.
- Write simple programs using a given software infrastructure, API, and tool chain.
- Gain exposure to net-centric computing, client-server applications, and simple relational database use.
- Become familiar with the notion of syntax, both for programs and documents, and the principle of separation of concerns.

Lectures: M 2:30-4:30pm, Lassonde Lecture Hall (Session A)
M 5:30-7:30PM, Curtis Lecture Hall F (Session B)

Labs: Labs take place in William Small 106 and 108. Labs occur weekly (starting Sept 18). You have a scheduled lab time. It is not possible to change your lab section. Please don't ask, the enrollment for EECS1012 is very tight and adjustments to accommodate everyone's lab choice has already been made.

Office Hours. My office hours are Tuesday 1-3pm in Lassonde 3022. Please use the lift to get to the 3rd floor.

Emails. Emails related to this course should be sent to eecs1012fall2017@gmail.com. The subject line of the email **must** include your student number. Emails not sent to this account, or not including your student number in the subject line will receive a terse (and likely much delayed) response asking you to follow this policy. Given the lack of privacy associated with email it is not possible to discuss specific issues related to course performance, etc. via email. (There are approximately 700 students in the class. Following this policy will help to ensure that your email is answered promptly and not lost.)

Textbook. Web Programming Step by Step – 2nd Edition, by Marty Stepp, Jessica Miller and Victoria Kirst. It is available at the bookstore. The textbook is required.

Marking Scheme. Each piece of work in the course will be assigned a numerical grade. Individual grades will be combined based on the weightings given below. Your final numerical grade out of 100 will be converted to a university letter grade using the standard table for the mapping. There are no make up tests, alternate mechanisms of evaluation, etc. Should you miss an evaluation due to medical reasons, a properly completed Attending Physician's Statement[1] is required. Once available, marks will be posted on Moodle.

The grade components of the course are as follows.

- **Subject-matter quizzes (10%).** Five pass/fail subject mastery assignments/quizzes at 2% each - 10% total. These Moodle quizzes are to be completed individually and at your own convenience. They are time limited (20 minutes max), and each has a due date associated with it. They are open book. You may use any resource – except another person – when answering these quizzes. A minimum of 80% is required on an individual quiz to pass it, and you may take each quiz as many times as you like up until the due date. There is a minimum delay between attempts of 24 hours.

- **Midterm tests (40%).** Two midterm tests at 20% each - 40% total. These two multiple-choice tests will be held in class on the dates given on the schedule page. These tests are closed book. There is no final exam.

- **Lab tests (36%).** Two lab tests at 18% each - 36% total. These are two labs that you will conduct **on your own**. These are supervised events during which you will solve coding problems in the lab. The lab will be closed notes (and closed internet), however, you will be provided with cheat sheets.

- **Labs (14%).** Seven labs at 2% each - 14% total. Details for each lab can be found through the course website. Each lab will has a PDF that you are expected to have read prior to the lab.

[1] https://registrar.yorku.ca/pdf/attending-physicians-statement.pdf

Syllabus. The following week-by-week tentative syllabus, it may change slightly. The slides will be available on the course website before lectures.

Week 1: 11 September - 15 September
Lecture: Introduction to the course, introduction to HTML.
Laboratories: There are no laboratories this week. Organized labs start next week.

Week 2: 18 September - 22 September
Lecture: HTML and CSS (part 1)
Laboratories: Lab 1: HTML CV

Week 3: 25 September - 29 September
Lecture: Layout and PHP Intro
Laboratories: Lab 2: HTML with CSS

Week 4: 2 October - 6 October
Lecture: PHP and Forms
Laboratories: Lab3: PHP

Week 5: 9 October - 13 October
Lecture: **No lecture (Thanksgiving)**
Laboratories: Lab 4: PHP Forms

Week 6: 16 October - 20 October
Lecture: PHP Wrap Up, Intro Java
Laboratories: Lab Test #1 [Tue-Fri Labs], Lab #4 for Monday Labs Sessions due to Holiday

Week 7: 23 October – 28 October
Lecture: Intro Java, In-class exam #1
Laboratories: Monday Labs Sessions take Lab Test #1 (all others sessions NO LABS).
Note: **Fall reading period October 26-29.**

Week 8: 30 October - 3 November
Lecture: Javascript DOM
Laboratories: Lab 5: Javascript

Week 9: 6 November – 10 November
Lecture: Event-processing for Javascript
Laboratories: Lab 6: Javascript + Dom

Week 10: 13 November - 17 November
Lecture: AJAX
Laboratories: **Lab 7:** Javascript Events

Week 11: 20 November - 24 November
Lecture: Database systems (SQL)
Laboratories: *Practice Lab*

Week 12: 27 November – 1 December
Lecture: Good Web Design + Course wrap up
Laboratories: Lab Test #2

Week 13: 4 December
Lecture: In-class exam #2
Laboratories: **No Lab**