Course Outline and Syllabus

Course: EECS1012 3.00 Introduction to Computing: a Net-centric Approach **Section:** A
Term: Summer 2025 **Course Webpage:** eclass.yorku.ca

If you are in a waiting list or plan to enroll in EECS1012?

Students who are not officially enrolled in the course (and plan to enroll) are expected to attend the lectures and labs from the first week of the term and complete all required work within the deadlines. Please contact the course director for details on how to obtain *temporary* access to the course materials while your enrolment status is being decided. Otherwise, if you miss any assessment deadline, you will receive 0 for that assessment. For official enrollment to the course, you must contact the UG office by emailing eecs-ug@yorku.ca, or use the EECS UG Office queue on QLess to talk to an advisor.

About This Document

This document communicates course information and defines expectations and responsibilities. In the case of petitions, it is used in the adjudication process as the definitive source of information about a course. This document expands on the course outline, which is also provided to students at the beginning of the academic year.

Course Calendar Description

This is an introductory programming course in computer science and engineering. It introduces skills and concepts such as computational thinking, procedural programming, variables/control-flow constructs, event-handling, and test-driven development within a net-centric context (using HTML, CSS and JavaScript).

Course Credit Exclusions: AP/ITEC3020 3.00, SC/CSE2041 3.00, LE/SC/CSE2041 4.00, LE/EECS2041 4.00.

Time and Location

Sec	Location (time)	Instructor	Email	Office hours
A	CLH H (T 14:30–16:20)*	Andriy Pavlovych	andriypv@yorku.ca	by appointment

* All time zones in this document are the local time in Toronto.

Lab sessions:

LAB01 (WSC106)	M	10:30–13:20	**first lab is on May 15**

First lecture is on May 6

First quiz is on May 25

Internet Connection or Technical Problems

We expect all students to have arranged for a dependable internet connection and reliable computer, for online quizzes, if any, as well as for submitting assignments. Regardless, students should also mitigate risks by having backup plans and leaving an adequate time buffer for each coursework and assessment.

Course Management and Organization

There are two hours of lectures and three hours of experiential labs weekly. Lectures introduce the concepts mainly using a problem-based approach; Students implement such concepts in labs. Labs are supervised, in that students will do the lab in a specific location at a specific time. Labs will be posted the week before they are due. **Importantly,** students should work on the lab exercises prior to their lab session. There will be teaching assistants in each lab to provide (limited) hints. Students are highly encouraged to discuss concepts of the lectures and exercises of the labs with their peers. This should be done mostly outside lecture and lab sessions--while complying with policies on academic honesty and integrity. We take matters related to academic dishonesty seriously and will use various technological means to ensure academic integrity. Make sure you learn the concepts by doing the lab step by step yourself– do not just copy to finish the lab. Overall, the labs' credit weight is very low, and they are primarily to prepare you for individual tests where you must work independently and will have a significantly higher credit weight.

This course is demanding in terms of time and should not be added to an already heavy load: Slides and many other resources are available online; yet, not actively engaging in lectures, lab works, office hours, the online discussion forum, and exercises could severely impact your grade to the extent of forcing you to drop the course or fail in it. The Lassonde standard recommendation is to spend about 10 to 13 hours per week on a 3-credit course. That means in addition to attending 2-hour weekly lectures, you need to spend 8 to 11 hours to review the topics by doing each weekly lab assignment. Most of this time should be actual **doing**, not watching or reading (online) materials. That means ~2 hours of purely programming per every and each weekday. If you do not have programming experience, you may find yourself to spend more hours per week to see good results. Also, remember to do coding every day consistently as opposed to once or twice a week. Talk to the course instructor in the first week for more tips.

Learning Outcomes for the Course

1. Use a set of computing skills such as reasoning about algorithms, tracing programs, test-driven development, and diagnosing faults.

2. Explain and apply fundamental constructs in event-driven programs, including variables and expressions, control structures (conditionals/loops), and API usage.

3. Write simple programs using a given software infrastructure.

4. Gain exposure to net-centric computing, client-server applications.

5. Become familiar with the notion of syntax, both for programs and web documents, and the principle of separation of concerns.

Materials

Lecture notes, labs, and other resources will be made available on the course's eClass page. In addition, online quizzes and subject matter tests, as well as lab submissions will be conducted using eClass. You are responsible for all information posted on eClass including all discussions and information in **online forum of eClass**.

Recommended (but not required) Course Textbooks

- Computer Science: A First Course, by Alexandra I Forsythe

  a great resource for many computational thinking examples and exercises, with the flowchart symbols we use in EECS1012.

  a link if you like to purchase it: **https://www.amazon.ca/Computer-Science-Alexandra-I-Forsythe/dp/0471266817**

- JavaScript for Kids, by Nick Morgan

  a great book for those of you new to programming. Don't underestimate the book because of its title as many topics in this book are well advanced. A digital copy of this book is available **here**. The strong point of this book is that it guides you how to develop simple projects quickly. This book can be used as a straightforward guideline for some of the quizzes in this course, even though you could find those topics in other online sources too. The major weak point of this book is that it does not teach computational thinking.

- Eloquent JavaScript, 3rd Edition, by Marijn Haverbeken

  a great book to start programming with and continue to excel it. A must-read for anyone who wants to gain a great knowledge of JavaScript. A digital copy of this book is available

here. This book can be used as a straightforward guideline for some of the quizzes in this course, even though you could find those topics in other online sources too. The major weak point of this book is that it does not teach computational thinking.

- Web Design with HTML, CSS, JavaScript and jQuery set, by Jon Duckett

  a set of two great books for those who want to start programming and become a great front-end developer. This is a link if you like to purchase it: **https://www.amazon.ca/Web-Design-HTML-JavaScript-jQuery/dp/1118907442** again this is not a good resource for learning computational thinking.

- JavaScript Tutorial, **https://www.w3schools.com/js/**

- Learn web development, **https://developer.mozilla.org/en-US/docs/Learn**

Evaluation (dates are tentative)

Assessment Item	**Time**	**Weight, %**
8 weekly labs [best 7]	starting the week of May 12	14
1 test and 2 lab tests	1. Tue June 24 (in class) 2. Thu, June 26 (during your lab session) 3. Thu, July 31 (during your lab session)	15 15 15
4 subject matter quizzes (SMQ)	1. Sun, May 25, 15 minutes from 8:30 to 23:30 2. Sun, June 8, 15 minutes from 8:30 to 23:30 3. Sun, July 13, 15 minutes from 8:30 to 23:30 4. Sun, July 27, 15 minutes from 8:30 to 23:30	6
Final	Aug 7 to Aug 14 (determined by the university)	35

Your final grade in the course will be based on the assessment items above. No "extra credit" assessments will be provided**.** To be fair and consistent with regards to the entire class, individual grades are not negotiable. Furthermore, marks will not be "rounded" or "bell-curved".

Overall, there are 9 labs, 2 tests, 2 lab tests, 5 SMQs, multi-stage project, and a final exam. For SMQs, we will automatically omit your one worst grade from the final calculation of your points, to mitigate for a bad day that you may have due to internet disconnection or other incidents. Similarly, we will automatically omit your two worst grades in labs.

Labs. Details for each lab will be posted approximately five days before they are due. Each lab will have a PDF that you are expected to have read prior to the lab. TAs are available to help you. Of course, you are strongly encouraged to attempt your labs before the lab sessions. Your work can be marked by a TA before the lab session time ends. For that, it is important that you sign-in to your officially enrolled lab. The labs files must be submitted to eClass by the deadlines specified there. Also, note that part of your grade in each lab is a mini quiz that is due 10 minutes after your lab sessions' start time. That quiz is meant to test if you have read and understood the description of the lab tasks and whether you reviewed the relevant course topics.

Students repeating this course are expected to redo all lab exercises from scratch. Reusing work from a previous offering of the course (even if it is your own work) or any other source is a violation of the Academic Conduct Policy and Procedures.

Tests. These tests consist of two parts: Design and Concepts. In the design part, you provide a solution for a computational problem typically using the flowchart language. In the conceptual part, there are several multiple-choice or similar (like short answer, filing blank, etc.). As with the other tests, any direct or indirect communication is not allowed. Students are responsible to have their photo ID.

Lab tests. These are two labs that are to be completed individually. You will still have access to reference resources on HTML, CSS, and JavaScript. However, as with the other tests, any direct or indirect communication with anyone is prohibited. The structure of lab tests consists of a Design and a Development part. In the design part, you provide a solution for a computational problem typically using the flowchart language. In the development part, you provide a programming solution mainly using the JavaScript language while you may need to develop some HTML and/or CSS parts too.

Both types of the tests described above must be completed during the scheduled lectures and lab sections you are officially enrolled in. That also means that these tests are not asynchronous, and you are expected to be available to do finish them during the specific hours within your scheduled lecture or lab.

Remarking requests: If you believe that a test was graded incorrectly, you may request a reappraisal of the work. A reappraisal **request** must be properly uploaded in the eClass page **before the deadline** (up to one week of receiving the original grade). It is essential that you

explain clearly why you think the work should be re-marked; otherwise, the request will be rejected. Note that the test will be re-graded in its entirety and that re-grading can result in the grade being raised, confirmed, or lowered. Remark requests will be processed within four weeks after the deadline.

Project. There is a web application project that will be delivered in four phases: requirements definition, design, implementation and testing, deployment. The project must be done in teams of two or three people. Individual work is NOT accepted. Further details will be announced in eClass.

Subject-Matter Quizzes. The SMQs tend to test your knowledge on recently addressed materials. For instance, in SMQ1, we may ask you questions to verify if you have read this document (the course syllabus/outline) thoroughly, among other questions. SMQs are asynchronous. In particular, you can write them any time between 8:30 and 23:30 on the quiz day; however, note that once you open each quiz, you **have up to 15 minutes to answer it**. You are responsible to make sure you have a secure internet connection and reliable computer before starting each quiz.

Final Exam. The final exam will be scheduled by the university between August 7 and 14. Students are expected not to arrange travel plans until they know their exams schedule.

Missed labs (and SMQs). If you miss up to two labs (and up to one SMQ) due to illness or technical problems such as internet disruption—or any other reason beyond your control—you will not lose any marks; instead, the weight of your missed assessment will automatically be transferred to your final exam. No paperwork is required as this will be done automatically for all students before we omit their worst grade in each of these categories for calculating their final grade. In other words, conducting two single bad lab or one SMQ is treated the same way as missing it completely; hence, you should always try to conduct it if you can as you will not lose any point.

Missed tests or lab-tests: If you miss Test 1 or Lab-Test 1 due to illness or technical problems such as internet disruption—or any other reason beyond your control—you will not lose any marks; instead, the weight of such a missed test will automatically be transferred to your Test 2 or Lab-Test 2, respectively. No paperwork is required. If you write Test 1 but miss Test 2, its weight will be transferred to your final exam. If you miss Lab-Test 2 or the final exam, you should request for a Deferred Standing Agreement.

The following table illustrates the resolution when a student missed one or more assessments.

Missed Assessment(s)	**Resolution**
One lab	No problem; it does not affect the final grade
One SMQ	The weight is transferred to the final exam
Two labs	The weight is transferred to the final exam
Two or more SMQs	Will potentially reduce your final letter grade by one point
Three to five labs	Will potentially reduce your final letter grade by two points
Six to eight labs	Will potentially reduce your final letter grade by three points
Midterm test	The weight is transferred to the final exam
Lab Test 1 only	The weight is transferred to Lab Test 2
Lab Test 2 only	Student should request a Deferred Standing; otherwise 0
Both Lab Test 1 and Lab Test 2*	Receive 0 in Lab Test 1; You should request a Deferred Standing for Lab Test 2; otherwise, 0 in Lab Test 2 too.
Final Exam	Student should request a Deferred Standing; otherwise 0

* In rare and exceptional cases that a student misses two tests due to extended illness, they may petition to have the mark deduction waived. If a student misses multiple assessment items, it is advisable for them to consider dropping the course due to pedagogical concerns. Please note that such petitions may not always be granted.

Deferred Examination

The Department of Electrical Engineering and Computer Science has predetermined that Deferred Examinations for the department's courses will be held during the last two days of the exam period of the same term. Students who are unable to write their final exam at the original schedule for any reasons beyond their control –such as illness, family emergencies, religious observance, etc.—may formally request to write a 1st deferred exam.

If the request is approved, the student should write the deferred exam during one of the last two days of the final exam period of the same term as determined by the department. If a student is unable to write the 1st deferred exam due to any reasons beyond their control, they can submit a 2nd request to participate in another deferred exam. The 2nd deferred exams are scheduled during the exam period of the following term. Note that any deferred exam beyond the 1st one may be designed by a different course director. However, the exam once written will

be sent to the original course director to be possibly adjusted and graded in the fairest way at their discretion.

Please note that requests for deferred standing must be submitted within certain timelines. For religious observance, the deadline is 21 days before the start of the exam period. For illness and other reasons, the deadline for submitting the request is as soon as possible and no later than 7 days after the exam date. Any petition, such as writing a 2nd deferred exam or missing a deadline, should be submitted immediately. Note that petitions may not be successful.

If allowed at all in the course outline, the procedures and dates for deferring any course-work other than the final exam are determined at the discretion of the course director.

Email Policies

· We highly encourage you to ask questions during lectures or office hours, and **use the eClass discussion forum**, before emailing the course instructor.

· Submission of any work (such as labs) by email receives 0. You should use eClass to upload any class work or paperwork within the designated deadlines. Email should be used only for special circumstances that are not facilitated in eClass.

· To save yourself time, do not ask a question answer to which is in the Course Outline and Syllabus or in the forum. Search this document and the course forum first.

· Only use your York email account.

· Please include "EECS1012", a brief indication of the topic in the subject line. Also provide your formal name (the one used within YorkU systems), Passport York username, and student number at the end of your message. These are necessary to access your course records and materials. Also include any additional information that is pertinent to the topic of your email.

· Use grammatical English. Do not use SMS-style talk (e.g., "r u gonna return the tests tmr?") or other shorthand or slang. For more guides on writing professional emails, **read this**.

· **Email messages not complying with these guidelines may not be answered**.

· We generally respond to emails within 24 hours. However, we reserve the right to not respond to any emails on evenings, weekends, or during holidays, as well as the emails that pose questions that have been already answered in this document or in the discussion forum.

Announcements, Course Content, and Submissions on eClass

Course announcements will be posted on eClass in the "Course Announcements" section. By default, all enrolled students should receive an email notifying them of a new announcement.

Regardless, it is the responsibility of each student to be aware of all course announcements that are made, so check the discussion forum in eClass regularly.

Also, all lecture notes, link to other resources, lab instructions, deadlines, and important dates are on eClass. Students will be required to submit their lab work on eClass within the designated deadlines.

To be fair and consistent with regards to the entire class, we do not make exceptions for individual students.

Copyrights

Images and materials presented in lectures are subject to Canadian copyright law. Lectures are the intellectual property of the professor. Course materials are the intellectual property of the associated author(s). You may not and may not allow others to reproduce or distribute lecture notes, test questions and other course materials publicly for commercial and non-commercial purposes without an express written permission from the professor or author. If it can be shown that these terms were violated by you, your course grade may be changed to an F even after the course is completed.

Academic Honesty

Students are expected to do their own work and to act with integrity. Accessing someone else's work during a test, communicating with other persons during a test, using unauthorized aids during a test, plagiarism, not reporting cheating by someone else, and impersonation are all examples of academically dishonest behaviour. Students repeating this course are expected to redo all lab exercises from scratch. Reusing work from a previous offering of the course (even if it is your own work) or any other source is a violation of the Senate Policy on Academic Honesty.

We take matters related to academic dishonesty seriously and we take measures to detect irregularities during all assessments. For example, network traffic may be logged, video surveillance may be considered, and multiple versions of the questions may be used. The work you submit may also be checked for signs of cheating using automated tools, sometimes not immediately.

Students are expected to read and understand the **Senate Policy on Academic Honesty**, with additional comments and explanations here: **https://lassonde.yorku.ca/student-life/academic-honesty-integrity-faculty-resources**. If you have any questions about the policy or would like to report a violation, please speak with your instructor.

Other Resources There is an academic integrity website with comprehensive information about academic honesty and how to find resources at York to help improve students' research and

writing skills, and cope with University life. Students are strongly encouraged to review the materials on this **SPARK Academic Integrity website**.

Discussion Forum Code of Conduct

· Students are encouraged to participate in the online eClass forums to ask or comment on questions relating to course concepts.

· Check to see if your question has already been posted. You are expected to search the forums, but you do not have to read each post. If your question has not already been asked, create a new post.

· Use a clear, informative subject line ("Please Help!" is **not** informative). Try to be as specific as possible.

· Post comments appropriate to the particular discussion. Off-topic posts may be deleted.

· Post only material relevant to the course. Other posts may be deleted.

· Be respectful. Posts containing personal insults, attacks, intimidation, or profanity may be deleted. Remember, TAs and instructors read forum posts too.

· Any post that appears to violate this code of conduct may be edited, moved, or deleted at the discretion of the moderators. If a post also gives indication of violating the **Senate Policy on Academic Honesty** or the **York University Student Code of Conduct**, further action may be taken. It is specifically **forbidden** to post or solicit solutions for quizzes, tests, or labs through the discussion forum (or elsewhere, for that matter; we monitor various online venues).

Classroom Code of Conduct

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom and other academic settings, and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class. The policy and procedures governing disruptive and/or harassing behaviour by students in academic situations is available **online**. See also:

· Student Rights and Responsibilities - **http://oscr.students.uit.yorku.ca/student-conduct**

· York University Racism Policy and Procedures – **https://rights.info.yorku.ca/race/**

· York University's Policies on Sexual Violence - **https://www.yorku.ca/secretariat/policies/policies/sexual-violence-policy-on/**

· Centre for Human Rights, Equity, and Inclusion - **http://rights.info.yorku.ca/lgbtq/**

Online Platforms

Several platforms will be used in this course (e.g., eClass) through which students will interact with the course materials, the course director / TA, as well as with one another. Please review the syllabus to determine how the class meets (in whole or in part), and how office hours and presentations will be conducted.

Students shall note the following:

· Zoom is hosted on servers in the U.S. This includes recordings done through Zoom.

· If you have privacy concerns about your data, provide only your first name or a nickname when you join a session.

Technology requirements and FAQs for eClass (aka Moodle) can be found here:

https://lthelp.yorku.ca/95440-student-faq

Additional Information

Access/Disability: York University is committed to principles of respect, inclusion and equality of all persons with disabilities across campus. The University provides services for students with disabilities (including physical, medical, learning and psychiatric disabilities) needing accommodation related to teaching and evaluation methods/materials. These services are made available to students in all Faculties and programs at York University.

Students in need of these services are asked to register with disability services as early as possible to ensure that appropriate academic accommodation can be provided with advance notice. You are encouraged to schedule a time early in the term to meet with each professor to discuss your accommodation needs. Please note that registering with disabilities services and discussing your needs with your professors is necessary to avoid any impediment to receiving the necessary academic accommodations to meet your needs.

Additional information is available at **Student Accessibility Services**

Religious Observance Accommodation: York University is committed to respecting the religious beliefs and practices of all members of the community, and providing reasonable accommodations for observances of special significance to adherents. Should any of the dates specified in this syllabus for an in-class test or examination pose such a conflict for you, contact the course coordinator within the first three weeks of class. Similarly, should an assignment to be completed in a lab, practicum placement, workshop, etc., scheduled later in the term pose such a conflict, contact the course coordinator immediately. Please note that to arrange an

alternative date or time for an examination scheduled in the formal examination periods, students must complete an Examination Accommodation Form, which can be obtained from Student Client Services, Student Services Centre, or online.

Additional information is available at
https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs

Health and Safety: As part of York's Community of Care Commitment, all members of the York community share in the responsibility of keeping others safe on campuses. In this class, as elsewhere on campus, students must comply with all University health and safety protocols,

Counselling, Health, and Well Being: Student Counselling, Health & Well Being supports students in realizing and developing their personal potential in order to maximally benefit from their university experience and manage the challenges of university life. Services include: peer-led workshops, certificate training programs, support groups, same-day and appointment-based counselling, short-term therapy, and more. Additional information is available **here**.