

EECS4315 (Section Z) Winter 2025
Guide to Written Test 1
WHEN: 09:00 – 09:50, Thursday, March 6
WHERE: LAS1006

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Last Updated: February 28, 2025

- You **must** take the written test **in-person**: any remote attempt will be marked zero automatically.
- All questions will be answered on the Section Z eClass site.
- You will be **solely** responsible for any **loss of time or marks** due to any of the following failing:
 - You have a working EECS account to login into an EECS lab machine.
 - You have a working PPY account to login into the eClass site (subject to Duo Mobile verification).

You are expected to have verified that you are able to complete the EECS and PPY logins prior to the test. Just find a time gap in LAS1006 and visit there to try your logins.

- This written test is **strictly** individual: identified collaborations will be reported to Lassonde for **a breach of academic honesty**.
- **You are given 40 minutes** to complete the submission. The time limit is **strict**.
- This written test accounts for 10% of your course grade.
- Unlike the lab exercises (and the later programming tests), there will be **no** starter project for you to download and import.

1 Rules

- You may **only** bring to your seat:
 - **A valid photo ID** (e.g., YU card, driver license, health card, passport)
Without a valid photo ID upon checks, you will be denied to continue with the test.
 - Stationary (e.g., pen, pencil, eraser)
 - Sketch paper (blank on both sides).
 - Water bottle
 - Mobile device (for Duo Mobile verification only)
During the test, always put the device face-down.
- All other personal belongings should be placed in front of the lab room.

- As soon as you are seated, login into a machine (using your EECS account), and then use a web browser (e.g., Firefox) to login into the Section Z eClass site (using your PPY account).
 - First complete the quiz on *academic integrity* (≈ 1 minute).
 - The written test will be *opened* for submission at **09:00**.
 - This is a **closed-book** test: use of any internet resources or notes is forbidden.
 - You are **forbidden** to use the TLA+ IDE during the test.
 - The written test will be *closed* for submission at **09:50**.
- In principle, there will be **no** questions allowed during the test.
 - TAs will **not** answer questions.
 - If really necessary, Jackie will respond to your question, but you may just be advised to read the question(s) again more carefully.

2 Format

- There might be multiple-choice questions:
 - A true or false question
 - A question with a **single** correct answer
 - A question with **multiple** correct answers

e.g., Say you are given 5 answers for the question: 2 of them are correct (and 3 of them are incorrect). Accordingly, for each correct answer you choose will receive a credit of $\frac{100\%}{2} = 50\%$, whereas for each incorrect answer you choose will receive a penalty of $\frac{-100\%}{3} = -33.3\%$.

Say you chose one correct answer and one incorrect answer, then you would receive $50\% + (-33.3\%) = 16.7\%$ of the full marks. Also, the minimum mark you can receive is 0 (e.g., when you chose one correct answer and two incorrect answers).

This mechanism is to ensure that one cannot just receive full/high marks by simply choosing (almost) *all* answers.
- There might be written questions requiring you to, e.g.,:
 - Write texts justifying modelling decisions.
 - Write an assertion (representing some pre- or post-condition) in valid PlusCal syntax.

3 Coverage of the Test

- Materials (slides, iPad notes, recordings) related to the following lectures will be covered:
 - Math Review lecture [PDF]
 - Model Checking lecture (up to and including [Slide 31](#)) [PDF]
- Lab1 and Lab2
 - You will **not** be asked to write algorithms in **PlusCal** syntax, but you **may** be asked to write assertions (representing pre- and/or post-conditions) in **PlusCal** syntax. That is, you may be asked to write predicates (using arithmetic operators as well as logical operators and quantifiers). **No** syntax reminder will be provided during the test.
 - You may also be given **PlusCal** fragments and asked questions about them.
- This written test will **not** cover:
 - The introduction lecture (here)

4 Example Questions

- Example questions will be made available on the Section Z eClass site (under the **Written Tests** section).

You can attempt these questions for as many times as you wish, but the submission will be **closed 30 minutes before** the actual test starts.

- Please understand that these questions are:
 - meant for familiarizing yourself with the **format** and **workflow** of the test;
 - **not** meant to cover **all** topics required by the actual test (you are expected to study **all** materials as listed in Section 3); and
 - on the **easier** side (in the actual test, there will be harder questions testing your proficiency on the materials).