EECS2030 (Sections B & G) Fall 2025 Guide to Written Test 1

<u>When</u> : Wednesday, October 29 (during your <u>enrolled</u> lab session)	
<u>Duration</u> : 60 minutes	
Section G (LAB 01/02/03)	Section B (LAB 01/02/03)
13:20 to 14:20	14:30 to 15:30
WSC 106/108	WSC 106/108
Registered Accommodation (from both sections)	
Starts at 13:20	
WSC 105	

CHEN-WEI WANG

LAST UPDATE: October 19

- You <u>must</u> attend the test in the room assigned to your enrolled session.
- There will be multiple test sessions running on the same day. Before all sessions end, it is considered a
 breach of academic integrity if you communicate about the content of your test with others attending
 a different test session.
- You **must** take the written test **in-person**: any remote attempt will be marked zero automatically.
- This written test is strictly individual: identified collaborations will be reported to Lassonde for a breach
 of academic integrity.
- This written test accounts for 6% of your course grade.
- Unlike the labs (and the later programming tests), there will be <u>no</u> starter project for you to download and import.
- All questions will be answered on the Sections B & G eClass site.
- You will be <u>solely</u> responsible for any **loss of time or marks** due to any of the following failing:
 - You have a working EECS account to login into a WSC lab machine.
 - You have a working PPY account to login into the eClass site (subject to Duo Mobile verification).

1 Rules

- You <u>must</u> attend the test in the room assigned to your enrolled session.
- Upon your arrival, please wait <u>outside</u> the lab room.
 - Once the rooms are set up for the test, you will be allowed for entry.
- You may **only** bring to your seat:
 - Stationary (e.g., pen, pencil, eraser)
 - Sketch paper (blank on both sides).

You <u>must</u> return the sketch paper, signed with your name, at the end of the test.

- Water bottle
- A photo ID (e.g., YU card, driver's license, passport)
 Digital YU card (with a photo) on your mobile device is acceptable.
- 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 Sections B & G eClass site (using your PPY account).
 - First complete the quiz on *academic integrity* (≈ 1 minute).
 - The written test will be *opened* and *closed* for submission during the test period.
 - This is a **closed-book** test: use of any internet resources or notes is forbidden.
 - You are **forbidden** to use any programming IDE (e.g., Eclipse) during the test.
- In principle, there will be $\underline{\mathbf{no}}$ questions allowed during the test.
 - TAs will <u>not</u> answer questions.
 - If really necessary, the instructor will respond to your question, but you may just be advised to read the question(s) again more carefully.

2 Format

- Most ($\geq 70\%$) of the questions will be multiple-choice questions. For examples:
 - 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 <u>correct</u> answer you choose will receive a credit of $\frac{100\%}{2} = 50\%$, whereas for each <u>incorrect</u> answer you choose will receive a penalty of $\frac{-100\%}{3} = -33.3\%$.

Say you chose one <u>correct</u> answer and one <u>incorrect</u> 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 <u>correct</u> answer and two <u>incorrect</u> answers).

This mechanism is to ensure that one cannot just receive full marks by simply choosing all answers.

- There might be written questions requiring you to, e.g.,:
 - Write a fragment of Java code
 - Explain how a given fragment of Java code works at runtime
 - Explain why a given fragment of Java code works

3 Coverage for the Test

- You need $\underline{\bf not}$ study Lab1, Lab2, and Lab3 for the test.
- The concepts about Github and terminal commands are <u>not</u> covered in the test.
- All topics covered in the review of OOP in Java:

• Call by Value & Object Equality

• Tutorial Videos (Part 1 & Part 2)

Link

[Pdf]

• IPAD NOTES

<u>Hint</u>. Be sure to familiarize yourself with the examples and concepts covered in Lab0.

Classes and Objects [Pdf]Exceptions [Pdf]

• Exceptions [Pdf]

• TDD WITH JUNIT [PDF]

Parts of Lecture 13 (October 22/23) <u>will be</u> covered in the test: these will be confirmed shortly after the class.

- Example codes made available on the lectures site
- Written Notes:
 - * Inferring Classes/Methods from JUnit Tests

[Pdf]

* Declaring and Manipulating Reference-Typed, Multi-Valued Attributes [Pdf

4 Study Tips for the Test

- The test is meant to <u>test your understanding</u> of the taught concepts (which is different from a programming test in which you are expected to write Java programs with no syntax or type errors).
- Go through the slides and annotated iPad notes to review the concepts and examples. Re-watch parts of the lecture/tutorial videos if necessary.
- Pay special attention to the logic explained on tracing Java code (e.g., use of a boolean variable to control the entrance into and exit from a loop, visualizing object creations and method calls).
- Given a piece of Java code, you are expected to judge:
 - If it does <u>not</u> compiler, then what **syntax errors** or **type errors**?
 - If it compiles:
 - Will an exception occur (e.g., IndexOutOfBoundsException, NullPointerException)?
 - If no exception will occur at <u>runtime</u>, then what **console output** will it produce? Are there any **logical errors** (i.e., the output is not as expected)?

5 Example Test

- An example test has been made available on the Sections B & G eClass site (under the Practice Written Tests section). You can attempt this test for as many times as you wish.

This example test will be <u>closed</u> for access <u>shortly before</u> the first test session starts (at 11 am on the test day).

- It is important to note that:
 - These practice questions are meant for familiarizing yourself with the <u>format</u> and <u>workflow</u> of the test and covering <u>only</u> some of the topics required by the actual test: you are expected to study <u>all</u> materials as listed in Section 4.
 - The level of difficulty of the actual test may be **higher**.