# EECS2030 (Sections E & F) Fall 2024 Guide to Written Test 1

<u>WHEN</u> : Wednesday, October 2 (during your <u>enrolled</u> lab session)		
<u>WHERE</u> : WSC $105/106/108$		
DURATION: 30 minutes		
Section E	Section F	
8:35 AM to 9:05 AM	4:05 PM to 4:35 PM	

#### CHEN-WEI WANG

- You <u>must</u> attend the test in the room assigned to your enrolled session (LAB 01, LAB 02, or LAB 03).
- There will be two test sessions running on the same day. Before both 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 <u>must</u> take the written test <u>in-person</u>: 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 4% 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 E & F 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 (LAB 01, LAB 02, or LAB 03).
- Upon your arrival, please wait <u>outside</u> WSC 105/106/108.
  - The test will take place only in these rooms.
  - Once the rooms are set up for the test, you will be allowed for entry.
- You may **<u>only</u>** 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 E & F eClass site (using your PPY account).
  - First complete the quiz on *academic integrity* ( $\approx 1$  minute).
  - The written test will be *opened* and *closed* for submission during the test period.
  - This is a <u>closed-book</u> 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 <u>**not**</u> study Lab1 for the test.
- The concepts about Github and terminal commands are  $\underline{not}$  covered in the test.
- All topics covered in the review of OOP in Java:

• TUTORIAL VIDEOS (PART 1 & PART 2)	Link
• IPAD NOTES	[ Pdf ]
• Classes and Objects	[PDF]
• Exceptions	(Slides 2 - 4, 10 - 18) [PDF]
• <u>Written Notes</u> :	

- \* 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 E & F 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 8am 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**.