EECS2101: Fundamentals of Data Structures
Sections X & Z – Winter 2025
Subject to Changes until: Monday, January 20

Course Syllabus

- All sections (M, N, X, and Z) are coordinated.
- You are expected to familiarize yourself with the policies that are common to **all** sections and, equally importantly, those specific to your **enrolled** section.
- This current document contains policies and information specific to Sections X & Z.
- For policies and information that are common to **all** sections, see here:

  https://www.eecs.yorku.ca/~wangcw/teaching/lectures/2025/W/EECS2101/notes/
  EECS2101-W25-Syllabus-Common-M,N,X,Z.pdf

1 INSTRUCTOR

- Chen-Wei (JACKIE) Wang
    - Contact: jackie@eecs.yorku.ca   (https://www.eecs.yorku.ca/~jackie/)

      > Jackie believes that **in-person** communication is the *most effective* for attending to your questions/concerns related course materials and grading. When you receive slow or no responses to your email inquiries, it is often an indication that Jackie is happy to help you during his **in-person** office hours and/or appointments.

- Office Hours:
    * 15:00 – 16:00, Mondays, Tuesdays, Wednesdays, Thursdays
    * These office hours will take place **in-person**.
    * Connecting via **Zoom** in these hours is possible, but please understand that priorities will be given to your fellow students showing up **in-person**.
    * by appointments (Zoom or In-Person)

  Campus Office: Lassonde Building, Room 2043   [19, D5 in the Keele campus]
  Virtual Office: https://yorku.zoom.us/my/jackie.loves.oxford

2 LECTURES

- Section X
    - 17:30 – 19:00, Tuesdays & Thursdays
    - CLH G (Curtis Lecture Halls)   [D5/26 on the Keele Campus]
- Section Z
    - 11:30 – 13:00, Tuesdays & Thursdays
    - CB 121 (Chemistry Building)   [D4/16 on the Keele Campus]
- Both sections will share the same lecture/study materials and be given assessments (tests & the exam) at the same level of difficulty.
- You are welcome to attend either or both lectures on the same day, but please understand that they may **not** be conducted at the exact same pace.
- To receive the attendance bonus (Section 6):
    - On iClicker, **only** join the course corresponding to your **enrolled section** (X or Z).
    - **Only** check in during your **enrolled section**.
    - Checking in during the lecture section that you are **not** officially enrolled in will **not** count towards the ultimate attendance bonus.

3   eClass Site

– A single site for Sections X & Z: `https://eclass.yorku.ca/course/view.php?id=134749`

4   Study Materials

– There will be no textbooks for this course. Study your instructor's lecture materials:
  - The lectures page:
    `https://www.eecs.yorku.ca/~jackie/teaching/lectures/index.html#EECS2101_W25`
– For a thorough review on OOP in Java, consider the study materials for:
  - EECS2030-F21 (remote delivery):
    `https://www.eecs.yorku.ca/~jackie/teaching/lectures/index.html#EECS2030_F21`
  - EECS2030-F24 (in-person delivery):
    `https://www.eecs.yorku.ca/~jackie/teaching/lectures/index.html#EECS2030_F24`
– Here are some optional reference books:
  - Data Structures and Algorithms in Java, 6th Edition (2014), Wiley
    Michael T. Goodrich, Roberto Tamassia, Michael H. Goldwasser
  - Algorithms, 4th Edition (2011), Addison-Wesley Professional
    Robert Sedgewick, Kevin Wayne   [`https://algs4.cs.princeton.edu/home/`]

5   Available Help Resources

– Jackie's office hours   [regular; request appointments if needed]
– TA office hours   [on demand via Zoom; see eClass for TA's contact info]

6 Attendance of Classes: Encouraged & Rewarding

– There are 23 upcoming in-class lectures in total (2 classes × 12 weeks − first class).

– Attending classes (in-time & focused) is an **indispensable** part of your learning.

– Despite it being your responsibility, Jackie would encourage you to attend classes by the following rewarding scheme:

- Attendance will be taken **randomly** (via iClicker) on X classes ($10 \leq X \leq 23$) ⇒ Attendance will be checked somewhere between <u>every class</u> and <u>every other class</u>. In a class where attendance is taken, **one more more checks** may be conducted: your attendance of that class will **not** count if you miss any of the checks. For example, if you wait for the first check to occur and choose to leave right afterwards, your attendance will not count as you may miss the subsequent check(s). That is, your attendance to a class will count **only if** you complete **all** checks.

- Each attendance check will be conducted briefly (e.g., for a few minutes) at sometime between **5 minutes** after class <u>starts</u> and **5 minutes** before class <u>ends</u>.

- **No** makeup attendance will be considered if you missed a check because you, e.g.,
  * arrived late
  * left early
  * did not pay attention or was absent when the attendance check took place

- Please **always** have the iClicker launched on your computer or mobile device:
  * There will be a sign-up sheet to accommodate the **(extremely) rare** occurrences of failed check-ins.
  You will be accommodated to sign on a sheet for **a maximum of 2 classes**.
  ⇒ You are **solely** responsible for resolving any technical issues that caused you to fail checking in via the installed iClicker.
  e.g., see: `https://mhe.my.site.com/iclicker/s/article/How-to-Troubleshoot-Your-Connection-to-the-iClicker-Student-App`

- At the end of the semester, say you attended Y classes:

if	$Y \geq \lfloor 90\% \cdot X \rfloor$	$\rightarrow$	5% bonus
elseif	$Y \geq \lfloor 80\% \cdot X \rfloor$	$\rightarrow$	4% bonus
elseif	$Y \geq \lfloor 70\% \cdot X \rfloor$	$\rightarrow$	2% bonus
elseif	$Y \geq \lfloor 60\% \cdot X \rfloor$	$\rightarrow$	1% bonus
elseif	$Y \geq \lfloor 50\% \cdot X \rfloor$	$\rightarrow$	.5% bonus
elseif	$Y < \lfloor 50\% \cdot X \rfloor$	$\rightarrow$	no bonus

- For examples:

$X = 23$ (check at every class) $X = 10$ (check at every other class)

if	$Y \geq 20.7$	$\rightarrow$	5% bonus
elseif	$Y \geq 18.4$	$\rightarrow$	4% bonus
elseif	$Y \geq 16.1$	$\rightarrow$	2% bonus
elseif	$Y \geq 13.8$	$\rightarrow$	1% bonus
elseif	$Y \geq 11.5$	$\rightarrow$	.5% bonus
elseif	$Y < 11.5$	$\rightarrow$	no bonus

if	$Y \geq 9$	$\rightarrow$	5% bonus
elseif	$Y \geq 8$	$\rightarrow$	4% bonus
elseif	$Y \geq 7$	$\rightarrow$	2% bonus
elseif	$Y \geq 6$	$\rightarrow$	1% bonus
elseif	$Y \geq 5$	$\rightarrow$	.5% bonus
if	$Y < 5$	$\rightarrow$	no bonus

– The above rewarding scheme **only** applies to in-class lectures.

– The allowable quota for you to miss classes, so as to get a particular bonus, already accommodates valid excuses (e.g., sick, family emergency).

Therefore:

- once the attendance-taking window expired, **no** late responses will be accepted;
- **no** reasons will be considered for missing attendance checks.

– The instructor reserves the right to **cancel** your bonus if, e.g.:

- you just wait to be taken attendance and leave the class shortly after;
- you attend classes but cause distractions (e.g., talking, using devices for irrelevant activities) to the instructor and/or to other students.

– What should I do to set up the iClicker for attendance checks?

- Refer to this starter guide (to install iClicker on your mobile device):

  https://lthelp.yorku.ca/polling-students/
  iclicker-student-app-quick-start-guide

  When creating an iClicker account, be sure to supply your **student number** and **...@my.yorku.ca** email (you are responsible for **not** receiving the bonus if an invalid student number or email is supplied).

- Ignore the first section "**For Courses using eClass integration**".
- Follow these sections:
  * "**For Courses not using eClass integration**"
  * "**Add Your Instructor iClicker Course**":

    Search "EECS2101-X (W'25) - Data Structures" (if officially enrolled in Sec. X).

    Search "EECS2101-Z (W'25) - Data Structures" (if officially enrolled in Sec. Z).

  * "**Respond to Polls**"
- When launching iClicker, it is critical that you allow iClicker to use your location; otherwise you will not be able to join the course and take attendance.
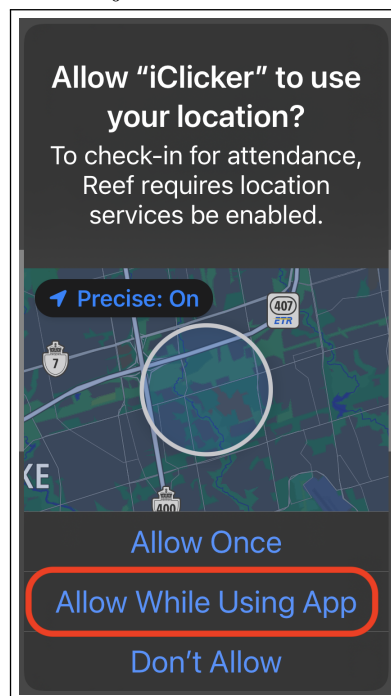
7 Semester Calendar

Figure 1 summarizes the schedule of required work items:

- Attend the scheduled in-class lectures on Tuesdays and Thursdays.
- For weeks where a (written or programming) test is scheduled:
  - Specific details for each test will be announced in advance.
  - The test will occur during the Tuesday or Thursday class time of your **enrolled session**.
    [date and location to be confirmed]
  - Lecture videos will be released to compensate the missed class.
- The assignment <u>release</u> dates may be *flexible*: they will be released as we get to the relevant topics in lectures. However, once released, you will be given an appropriate amount of time for completion.

EECS2101 Fundamentals of Data Structures (Section X & Z, Winter 2025) - Semester Calendar					
	MON	TUE	WED	THU	FRI
Week 1	January 6	7 Lecture 1	8	9 Lecture 2	10
Week 2	13	14 Lecture 3	15	16 Lecture 4	17 Assignment 1: Recursion
Week 3	20	21 Lecture 5	22	23 Lecture 6	24
Week 4	27	28 Lecture 7	29	30 Lecture 8	31
Week 5	February 3	4 Lecture 9	5	6 Lecture 10	7 Assignment 2: Linked Lists
Week 6	10	11 Lecture 11	12	13 Lecture 12	14
Reading Week	17	18	19	20	21
Week 7	24	25 ProgTest1 (X) Lecture 13 (Z)	26	27 ProgTest1 (Z) Lecture 13 (X)	28
Week 8	March 3	4 Lecture 14	5	6 Lecture 15	7 Assignment 3: Linked Trees (Part 1)
Week 9	10	11 WrittenTest (X) Lecture 16 (Z)	12	13 WrittenTest (Z) Lecture 16 (X)	14 *Drop Deadline*
Week 10	17	18 Lecture 17	19	20 Lecture 18	21 Assignment 4: Linked Trees (Part 2)
Week 11	24	25 ProgTest2 (X) Lecture 19 (Z)	26	27 ProgTest2 (Z) Lecture 19 (X)	28
Week 12	31	April 1 Lecture 20	2	3 Lecture 21	4
Week 13	7 Study Day	Exam Period (April 8 to April 25)			

Figure 1: EECS2101 (X & Z) W25 Semester Calendar – Expected Work Items

8 Coverage of Tests

Tentatively, referencing the semester calendar in Figure 1 (p7):

– <u>Written Test</u> covers Lectures 1 – 15
– <u>Programming Test 1</u> covers Assignment 1 and Assignment 2
– <u>Programming Test 2</u> covers Assignment 3

9 Weekly Schedule

In the time table below, each cell denotes a 30-minutes interval.

– Cell 11:30 denotes the interval starting at 11:30 and ending at 12:00.
– For example, office hours (on Mondays, Tuesdays, Wednesdays, and Thursdays) start at 15:00 and end at 16:00.

	Monday	Tuesday	Wednesday	Thursday
8:30				
9:00				
9:30				
10:00				
10:30				
11:00				
11:30		EECS2101 Z Lecture CB 121		EECS2101 Z Lecture CB 121
12:00				
12:30				
13:00				
13:30				
14:00				
14:30				
15:00	Office Hour (In-Person, Zoom)			
15:30				
16:00				
16:30				
17:00				
17:30		EECS2101 X Lecture CLH G		EECS2101 X Lecture CLH G
18:00				
18:30				