EGCI 213 – Programming Paradigms, Trimester 3/2024-2025
Tuesday & Thursday (14.00-15.50), Lab 1409 at MUIC

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Join Google Classroom for course materials and coursework submission

- Use Google or gmail account that is not @student.mahidol.edu
- Google classroom https://classroom.google.com (class code = ia7yyhjd)
- Your user name must contain real name & surname in English

Course Description: introduction to a variety of programming paradigms, programming languages, and language implementations, including object-oriented programming, event-driven programming, and concurrent programming.

Course-level learning outcomes (CLOs): on completion of the course, the students will be able to

CLO1 Identify and explain key elements in major programming paradigms
CLO2 Write Java programs to solve given problems correctly

Textbooks

- **รังสิพรรณ มฤคทัต, กระบวนทัศน์ในการเขียนโปรแกรม**
- Tucker AB, Noonan R. Programming languages. New York (NY): McGraw Hill
- Sebesta RW. Concepts of programming languages. Boston (MA): Addison-Wesley
- Any Java programming book

Marking

- 30% Midterm exam (40 midterm points, open-book + calculator)
- 30% Final exam (40 final points, open-book + calculator)
- 25% Group projects (40 project points)
- 13% Exercises (90 exercise points)
- 2% Class attendance (16 attendance points, ≥ 16 out of 21 classes)

We have 21 classes (18 normal + 3 makeup) + Midterm + Final presentation

Improper class etiquette (e.g. eating/drinking inside the lab, doing coursework of other courses, playing games or using irrelevant programs during the lecture) will result in losing attendance point for that class session.

In case of absence with letter/notification, you will still get attendance point but your absence will be counted. And if your class attendance is much below 80%, you may not be allowed to take the Final exam.

Grading: A (≥ 90%), B+ (85%), B (80%), C+ (75%), C (70%), D+ (65%), D (60%), F (< 60%)

Tentative Schedule

		Date	Topics	Assignments
1	Tue	22 Apr	Ch.1 Introduction	Project 3: GUI
2	Thu	24 Apr	Ch.2 Java overview	Ex 1: basic
3	Tue	29 Apr	Ch.3 Fundamental concepts	
4	Thu	1 May	Ch.3 Fundamental concepts	Ex 2: file
5	Tue	6 May	Ch.4 Object-oriented programming	
6	Wed	7 May (12-14)	Ch.4 Object-oriented programming	Ex 3: arrays + objects, Project 1: OOP
	Thu	8 May	No class	
	Tue	13 May	No class	
7	Thu	15 May	Ch.5 Object-oriented programming	Ex 4: interface
8	Tue	20 May	Ch.5 Object-oriented programming	Ex 5: exception
9	Thu	22 May	Ch.5 Object-oriented programming	
10	Tue	27 May	Review	
11	**Thu**	**29 May**	**Midterm Exam (chapters 2-5)**	
	Tue	3 June	No class (Queen Birthday)	
12	Wed	4 June (12-14)	Ch.6 Multithreaded programming	
13	Thu	5 June	Ch.6 Multithreaded programming	Ex 6: threads
14	Tue	10 June	Ch.7 Multithreaded programming	Project 2: multithreaded
15	Thu	12 June	Ch.7 Multithreaded programming Midterm feedback	Ex 7: synchronization
16	Tue	17 June	Ch.8 Graphical user interface (GUI)	
17	Thu	19 June	Ch.8 Graphical user interface (GUI) Ch.9 Event-driven programming	
*18	Tue	24 June	Ch.9 Event-driven programming	
*19	Wed	25 June (12-14)	Ch.9 Event-driven programming	Ex 8: events
*20	Thu	26 June	Ch.10 Event-driven programming	
21	Tue	1 July	Ch.10 Event-driven programming	Ex 9: events
22	Thu	3 July	Review	
23	Tue	8 July (13-17)	**Final project presentation**	
	Thu	10 July	No class (Asahna Bucha)	Last day for all submissions
	Tue	**15 July**	**Final Exam (chapters 6-10)**	

* Withdrawal week

Due to my very tight schedule, the makeup class can only be either Monday or Wednesday afternoon (less likely to crash with other EGCI classes). If you can't attend the class due to conflict with another subject:

- Send me an email with screen capture of your Sky+ class schedule to get attendance point.
- Study course materials & lecture clips in Google Classroom by yourself and ask questions in the next classes for any issue you don't understand.

Exercise & project submission

- Exercises can be done individually or in pair. Projects can be done by a group of <= 5 students. Pairs and groups are not fixed – they can be changed from one exercise/project to another.
- All assignments must be submitted to Google Classroom. Email submission is not accepted.
- All assignments are graded only once. Members can't be added to the graded exercises/projects.
- The score of each exercise = 10. Points will be deducted for wrong results, incomplete program, or late submission. You have 1 week to finish each exercise and 2-3 weeks to finish each project.

  < 1 week late 0.5 point deduction

  ≥ 1 week late 1 point deduction per week

Intellectual right of course materials & assignments

All the course materials, exercises, and projects are the results of my 20 years of teaching experience, my hard-working effort.

- DO NOT upload my course materials & assignments to any AI site, homework helper site, technical forum, etc.
- If you need to seek help from them, paraphrase the content rather than throwing the whole files to the Internet.

AI usage policy

- Taking code from AI or any homework helper site without knowing how it works is strongly discouraged. If I find your code being too advanced or suspect that you don't do the coding by yourself at all, you may be asked to explain it or do live coding in person.