Gebze Technical University

Department of Computer Engineering

CSE 343 Software Engineering

Fall 2023

Syllabus

Instructor

Assoc. Prof. Dr. Habil KALKAN Email: hkalkan@gtu.edu.tr

Teaching Assistant

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Current and other useful information about this course will be kept on the student information system and course page on Microsoft Teams.

Required Textbooks

[A] Software Engineering, 10th Edition, Ian Sommerville, Pearson.

[B] The Devops Handbook: How to Create World-Class Agility, Reliability, and Security in Technology Organizations, Gene Kim, Patrick Debois and John Willis, Trade Select.

Auxiliary Textbook

Yazılım Mühendisliği, Ali Arifoğlu and Ali Doğru, SAS Yayınları. [In Turkish]

Course Prerequisites

You are supposed to pass the object-oriented programming course (CSE 241). If you do not satisfy this condition, please talk to the instructor.

Grading

The course grade will be determined approximately as follows:

Group Score (GS = a+b+c+d):

- a) Presentation of 1. Prototype and its report: %20
- b) Presentation of 2. Prototype and its report: %20
- c) Final report: %20
- d) Demo Presentation: %20

Individual Score:

- 1. Homeworks: %20 (two HWs)
- 2. GS*0.7+ GS*0.3*k

k is the coefficient your scrum muster will give you where $0 \le k \le 1$

- 3. Class participation and attendance might give you an extra grade if it is close enough.
- 4. Homeworks will be personal but rest will be the project group scores and each person will directly get the 70% of the group score. The remaining 30% of the group score will be depend on the group participation who that will be rated by your scrum master.

Attendance

Active attendance is required. On Monday, the students present the progress of their projects to the teaching assistant. A student must present at least 70% of his/her work on time, otherwise he/she will get a grade of VF. You are responsible from all the subjects covered in the class. Read related chapters before the class. Each member of the project teams are supposed to make the assigned task on time.

Announcements

All the class related announcements will be made either in class or at the course teams page. Students are required to monitor the team page regularly.

Honor Code

You should not misrepresent someone else's work as your own. Do not use work from someone else. All cases of confirmed cheating will be reported for discipline action.

Topics to Be Covered

Week	Topic	
1	Introduction to Software Engineering	A1
2	Software Development Lifecycle Models	A2
3	Agile Software Development	A3
4	Agile Software Development	A speaker from industry
5	Requirements Engineering	A4
6	Project Management and Planning	A22
7	Presentation of First Prototypes	
8	Project Planning	A23
9	System Modeling	A5
10	Design Principles	A6, A7
11	Presentation of Second Prototypes	
12	Software Testing and Evolution	A8
13	Software Evolution	A9
14	System Engineering	A19
15	Final Presentations of the Projects	

Project Teams:

- Max 5 persons
 - 1 PM (Project Manager/Scrum Master)
 - 1 PO (Product Owner)
 - o 3/4 Developer

(PM and PO will also act as a developer)

Deadlines:

- Define your teams until 11th of October (23:00)
 Define your Project until 18th of October (23:00) Get confirmation from instructor/course assistant.