BLG 252E Object-Oriented Programming
Spring 2023

Instructors:

- Assoc.Prof. Feza Buzluca CRN: 23136
  https://akademi.itu.edu.tr/en/buzluca
  https://web.itu.edu.tr/buzluca/
- Assoc.Prof. Gülşen Eryiğit CRN: 23135
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Research Assistants:

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Course site:

http://ninova.itu.edu.tr

Course time and Classrooms:

Monday 8:30-11:30 AM

- Gülşen Eryiğit's section (CRN:23135): MDB A101 (The Faculty of Mines Building)
- Feza Buzluca's section (CRN:23136): MDB A102 (The Faculty of Mines Building)

Students must attend the section for which they have officially registered. Please check your actual section by logging into https://www.sis.itu.edu.tr.

Description:

Fundamentals of Object-Oriented Programming. Classes, objects, inheritance, polymorphism, exception handling, and templates. Examples are given in C++.

Text Books:

- Horton and P. van Weert, *Beginning C++20: from novice to professional*, Sixth edition. New York, NY: Apress, 2020.
- B. Stroustrup, *The C++ programming language*, Fourth edition. Upper Saddle River, NJ: Addison-Wesley, 2013.

Homework (Take-home exams):

There will be three homework assignments (3 x Take-home exams). You are expected to make an honest, independent attempt to solve and turn in your answers to each homework question. **Object-oriented programing can only be mastered by solving problems**, not just by listening to a lecturer. Therefore, doing the homework assignments is crucial to performing well in this class. If you are having considerable difficulty with the early assignments, this is a sign that you may be in over your head - you should contact us immediately. We can help you understand the parts you are confused about.

The assignments will require a substantial time commitment over several days (several hours per week outside of class should be expected). Be sure to budget sufficient time to complete assignments before the deadline.

You may not copy solutions from a classmate or from the Internet. This is considered cheating! Homework is individual. There are no group assignments in this course.

Attendance:

It is imperative that you attend the lectures and pay attention.

You are required to attend 70% of the lectures in order to be allowed to take the final exam.

Those who do not meet the attendance requirement will fail the course with a grade of VF. (Article 23, Undergraduate Education Regulations, https://www.sis.itu.edu.tr/TR/mevzuat/lisans-yonetmelik.php)

Note that the 70% attendance rule still applies even if you have taken this course before. There are NO exceptions. Attendance may be taken at any point in the lecture.

Evaluation:

The distribution of percentages for the course grade will be as follows:

- Homework (3 take-home exams): 30 %
- Midterm: 30 %
- Final: 40 %

Eligibility to take the final exam:

Students must meet the following criteria to take the final exam:

- Students must attend 70% of lectures.
- Students must have a mid-semester average grade of at least 35/100.

The average mid-semester grade is computed using the formula below:

$$\text{Avg. mid-semester grade} = (\text{Assignment average} + \text{Midterm})/2 \geq 35$$

Any student who gets a grade lower than the required grade on any of these assessments will fail the course with a grade of VF and not be allowed to take the final exam.

Course grade:

Your grade for this course will be determined by your scores on the midterm, homework, and the final, not by any external circumstances which you think are “special" or “unique." There are no subjective criteria in this course. The exams and homework are graded based on the same objective rubrics for all students.

The partial credit you receive on exam questions is at the sole discretion of the course instructors and assigned consistently across all students based on specific criteria. In case it is not already obvious, your grade in this course, or any course for that matter, is solely your own responsibility.

The only way to pass the course is to work hard and get sufficient grades on exams and assignments. **Do not contact us at the end of the semester to negotiate a better grade**.

Midterm: The midterm will be on **Monday, April 24, 2023**. The time will be announced later.

Final: The final exam will be given during the final exam period (May 22 – June 4, 2023), at the time and location determined by the University.

Announcements:

Announcements are made on the course site and by e-mail. You are expected to check the Ninova website and your ITU e-mail for homework and announcements. In addition, you are responsible for all announcements that may be made on the course website and in class (that may or may not be included in this syllabus).

Academic honesty:

You are expected to read the Undergraduate Education Regulations (https://www.sis.itu.edu.tr/TR/mevzuat/lisans-yonetmelik.php) and ITU Academic Honesty Pledge (https://www.sis.itu.edu.tr/TR/mevzuat/akademik-onur-sozu-esaslar.php) and behave accordingly. Cheating on exams or on homework will be punished in the most severe manner, resulting in failing the course with a grade of VF, as well as disciplinary action.

Every piece of work that you turn in with your name on it must be yours and yours alone. No coworking is allowed on any test or homework. You must not turn in work that is not yours. Specifically, you are not allowed to copy someone else's homework. This is plagiarism. You must not enable someone else to turn in work that is not his or hers. Do not share your work with anyone else. You may not copy solutions from the Internet either. This is considered cheating!

E-mail etiquette:

Your full name must appear in the e-mail. The e-mail subject must be "BLG 252E".

Do not send the same e-mail repeatedly.

Your e-mails may be in English or Turkish. Regardless of which language you use, use proper grammar, lowercase/uppercase letters, and punctuation. Your e-mails should not look like chat messages.

Tentative course schedule (subject to change):

Week	Date	Subject
1	20-Feb	Introduction, Non-object-oriented features
2	27-Feb	Classes and Objects, Access specification
3	6-Mar	Constructors, Destructors, Constant objects
4	13-Mar	Static objects, Nesting objects (has-a relation), ***1st Assignment***
5	20-Mar	Operator Overloading
6	27-Mar	Inheritance (is-a relation) ***2nd Assignment***
7	3-Apr	Special Member Functions and Inheritance
8	10-Apr	Polymorphism
9	17-Apr	Exceptions ***3rd Assignment***
10	24-Apr	Midterm
11	1-May	*Labor and Solidarity Day* **No class**
12	8-May	The Standard Template Library (STL): vectors, lists
13	15-May	STL, smart pointers
14	22-May	Review, Examples