TED UNIVERSITY, COURSE SYLLABUS

Faculty	Engineering	**Department**	Computer Engineering

Course Code & Number	**CMPE 112**	**Course Title**	**Fundamentals of Programming I**
Type of Course	☑Compulsory ☐Elective	**Semester**	☑Fall ☐Spring ☐Summer
Level of Course	BSc	**Year of Study**	Freshman
Course Credit Hours	(2+0+3) 3	**Number of ECTS Credits**	6
Pre-requisite	N/A	**Co-requisite**	N/A
Mode of Delivery	☑ Face-to-face ☐Distance learning	**Language of Instruction**	☑ English ☐Turkish
Course Coordinator		**Course Lecturers**	Emin Kuğu Bilgin Avenoğlu Venera Adanova Ulaş Güleç Elif Kurtaran Özbudak Yücel Çimtay Burak Ekici
Required Reading	Walter Savitch, Java: An Introduction to Problem Solving and Programming.	**Course Assistant(s)**	İbrahim İleri Mehmet Bahadır Aşkın Deniz Merve Gündüz Semihanur Aktay Merve Işıl Peten

Course Catalog Description	Variables. Assignment statements. Built-in data types. Conditions. Loops. Arrays. Input & output management.	
Course Objectives	The objective of this course is to provide a fundamental understanding of procedural programming, enabling students to abstract simple problems and encode them in a programming language using simple constructs.	
Course Learning Outcomes	Upon successful completion of this course, a student will be able to 1. Analyze a given problem and refine it into atomic components 2. Write code corresponding to atomic components of a problem 3. Use built in data types and simple constructs in a programming language 4. Use conditions in a programming language 5. Use loops in a programming language 6. Use arrays in a programming language 7. Manage input & output in a programming language 8. Write code corresponding to Java Classes and Methods	
Teaching Methods & Learning Activities	☑ Telling/Explaining ☑ Discussions/Debates ☑ Questioning ☑ Reading ☐ Peer teaching ☐ Scaffolding/Coaching ☑ Demonstrating ☑ Problem solving ☐ Inquiry ☐Collaborating ☐ Think-Pair-Share ☐ Predict-Observe-Explain	☐ Simulations & Games ☐ Video Presentations ☐ Oral presentations/Reports ☐ Concept Mapping ☐ Brainstorming ☐ Drama/Role Playing ☐ Seminars ☐ Field Trips ☐ Guest Speakers ☑ Hands-on Activities ☐ Service Learning ☐ Web Searching

	☐ Microteaching ☑ Case Study/Scenario Analysis	☑ Experiments ☐ Other(s): ……
Assessment Methods (Formal & Informal)	☑ Test/Exam ☑ Quiz/Homework ☐ Oral Questioning ☑ Laboratory work ☐ Performance Project	☐Observation ☐ Self-evaluation ☐ Peer-evaluation ☐Portfolio ☐Presentation (Oral, Poster) ☐Other(s): ……

Student Workload (Total 161 Hrs)	☑ Lectures …… 28hrs ☑ Course Readings ……25hrs ☐ Workshop …… hrs ☐ Online Discussion…… hrs ☐ Debate …… hrs ☐ Work Placement …… hrs ☐ Field Trips/Visits …… hrs ☐ Observation ……hrs ☑ Laboratory Applications ……33hrs ☑ Quizzes …… 15 hrs ☑ Hands-on Work …… 15hrs ☐ Homework …… hrs	☑ Midterm I ……10 hrs ☑ Midterm II …… 15 hrs ☑ Final …… 20 hrs ☐ Resource Review …… hrs ☐ Research Review …… hrs ☐ Report on a Topic …… hrs ☐ Case Study Analysis …… hrs ☐ Oral Presentation…… hrs ☐ Poster Presentation …… hrs ☐ Demonstration …… hrs ☐ Web Designs …… hrs ☐ Mock Designs …… hrs ☐ Team Meetings …… hrs ☐ Other …… hrs

COURSE ASSIGNMENTS
A. Midterm [25%]
One midterm exam that is worth 25% of the overall course grade.
B. Final Exam [30%]
There will be a final examination worth 30% of the overall grade.
C. Quizzes [20%]
There will be 4 quizzes where each of them is worth 5% of the overall grade.
D. Laboratory Works [25%]
There will be 10 graded Lab works. Each lab is worth 2.5 points.

COURSE POLICIES

I . Attendance

Attendance to the course is mandatory.

1) The student attending less than 70% (8 weeks (16 hours), attendance will start on the third week) of Lecture Hours will get **FX** grade.
2) The student attending less than 8 Laboratory Works will get **FX** grade.

II . Missed Work

Makeups for midterm exams will be provided if the student can provide a legal document confirming a life threatening health issue at the time of the exam, or with the consensus of the CMPE faculty.
There will be no makeup for labs and quizzes.

III. Late Assignment Submission Policy

Late submissions will not be graded.

IV. Extra Credit

Extra credits will not be offered.

V . Assignment Rules

All assignment works must be done individually. A student can submit only one work. In case of multiple submissions, only the latest submission will be considered. Students cannot submit work on other students' behalf.

VI. Plagiarism

All of the following are considered plagiarism:

- turning in someone else's work as your own
- copying words or ideas from someone else without giving credit
- failing to put a quotation in quotation marks
- giving incorrect information about the source of a quotation
- changing words but copying the sentence structure of a source without giving credit
- copying so many words or ideas from a source that it makes up the majority of your work, whether you give credit or not" (www.plagiarism.org)

Plagiarism is a very serious offense and will be penalized accordingly by the university disciplinary committee. The best way to avoid accidentally plagiarizing is to work on your own before you ask for the help of other resources.

VII. Cheating

Cheating has a very broad description which can be summarized as "acting dishonestly". Some of the things that can be considered as cheating are the following:

- Copying answers on examinations, homework and laboratory works,
- Using prohibited material on examinations,
- Lying to gain any type of advantage in class
- Providing false, modified or forged data in a report
- Plagiarizing.
- Modifying graded material to be regraded.
- Causing harm to colleagues by distributing false information about an examination, homework or laboratory

Cheating is a very serious offense and will be penalized accordingly by the university disciplinary committee.

VIII. Class Participation

Participation in class is necessary but not mandatory. However, if you do not attend the laboratory and complete the requested tasks, you cannot /will not get the assigned points from the laboratory. By actively participating in class, you can improve your learning process and immediately confirm what you have earned and what you have not internalized. Do not forget that you are not expected to know all of the material being discussed in class. Actually, you are expected not to know it. Therefore, there is no point in being hesitant to join a conversation or ask a question.

IX. Class Readings

Class readings are necessary but not mandatory. The material covered in class by your instructor will only provide a fundamental understanding of the general context. If you are willing to effectively learn something, you must actively work on it yourself. Reading is one of the most successful ways of learning about a topic.

	TENTATIVE COURSE OUTLINE			
	Dates	**Topics**	**Readings**	**Assignments**
W1	04 - 08 Oct	Introduction to Computers	Chapter I	NO LAB
W2	11 - 15 Oct	Variables and Expressions	Chapter 2, Section 2.1	Lab 00 Eclipse – Variables (Attendance Mandatory)
W3	18 - 22 Oct	Variables and Expressions	Chapter 2, Section 2.1	Lab 01 Variables and Expressions
W4	25 - 29 Oct	Variables and Expressions, I/O	Chapter 2, Section 2.2, 2.3	Lab 02 Variables, casting
W5	01 - 05 Nov	Flow of Control: Branching, if-else	Chapter 3, Section 3.1	Lab 03 Variables I/O ***Quiz01 (Saturday) 19:00 – 19:30***
W6	08 - 12 Nov	Flow of Control: **HOA** (if-else) Branching, switch	Chapter 3, Section 3.2, 3.3	Lab 04 Branching, if-else
W7	15 - 19 Nov	Flow of Control: Loops – While/Do-while	Chapter 4, Section 4.1	Lab 05 Branching, switch ***Quiz 02 (Saturday) 19:00 – 19:30***
W8	22 - 26 Nov	Flow of Control: Loops - For	Chapter 4, Section 4.2	***MIDTERM (27 Nov) 10:00 – 12:00***
W9	29 Nov - 03 Dec	Arrays	Chapter 7, Section 7.1	Lab 06 Loops, While
W10	06 - 10 Dec	Arrays **HOA**	Chapter 7, Section 7.1	Lab 07 Loops, For
W11	13 - 17 Dec	Defining Classes and Methods	Chapter 5, Section 5.1, 5.3	Lab 08 Arrays and Loops I ***Quiz 03 (Saturday) 19:00 – 19:30***
W12	20 - 24 Dec	Objects and Methods	Chapter 6, Section 6.1, 6.2	Lab 09 Arrays and Loops II
W13	27 - 31 Dec	Objects and Methods	Chapter 6, Section 6.1, 6.2	Lab 10 Classes and Methods
W14	03 - 07 Jan	Arrays in Classes and Methods	Chapter 7, Section 7.2	***Quiz 04 (Saturday) 19:00 – 19:30***