



MARMARA UNIVERSITY - FACULTY OF ENGINEERING

2017-2018 Fall

ECON2004 Engineering Economy

**COURSE DESCRIPTION FORM**

<b>Offering Department</b>	Department of Computer Engineering		Undergraduate must course							
<b>Course Code</b>	ECON2004									
<b>Course Name</b>	Engineering Economy									
<b>Language of Instruction</b>	English									
<b>ECTS</b>	4									
<b>Contact Hours</b>	Theoretical (T): 2			Practice (U): 0			Laboratory(L): 0			
<b>Pre-requisites</b>										
<b>Instructor</b>	<b>Name</b>	Arif Orçun SÖYLEMEZ								
	<b>E-mail</b>	orcun.soylemez@marmara.edu.tr								
<b>Course Materials</b>	<b>Mandatory</b>	Engineering Economy, William G. Sullivan, Elin M. Wicks, James T. Luxhoj, Prentice Hall Company. Any edition will do.								
	<b>Recommended</b>									
<b>Course Objectives</b>	To give basic information about engineering economy, monetary policies and money markets									
<b>Course Content</b>	Introduction to economy, economic policies in the world, central banks, money markets and exchanges.									
<b>Learning Outcomes</b>	<b>LO1</b>	Calculate the time value of money.								
	<b>LO2</b>	Compare alternative investment decisions.								
	<b>LO3</b>	Gain knowledge about money flow and management.								
	<b>LO4</b>	Gain knowledge about investment planning.								
	<b>LO5</b>	Gain knowledge about money markets and exchanges.								
	<b>LO6</b>	Gain knowledge about engineering economy.								
<b>Program Outcomes</b>					<b>LO1</b>	<b>LO2</b>	<b>LO3</b>	<b>LO4</b>	<b>LO5</b>	<b>LO6</b>
<b>PO10</b>	Information on business practices such as project management, risk management and change management (a); awareness of entrepreneurship and innovation (b); Information on sustainable development (c).				a	a	a	a	a	a
<b>Subjects (Knowledge, Skills and Behaviours), Contributions of Subjects to Learning Outcomes, Assessment Methods</b>	<b>No</b>	<b>Week</b>	<b>Subjects</b>	<b>LO1</b>	<b>LO2</b>	<b>LO3</b>	<b>LO4</b>	<b>LO5</b>	<b>LO6</b>	
	<b>K1</b>	1	Introduction to engineering economics.	MF	MF	MF	MF	MF	MF	
	<b>K2</b>	2-3	Cost concepts.	MF	MF	MF	MF	MF	MF	
	<b>K3</b>	4	Economic cash flow.	MF	MF	MF	MF	MF	MF	
	<b>K4</b>	5	Techniques of cost calculation.	MF	MF	MF	MF	MF	MF	
	<b>K5</b>	6-8	Relation of money and time.	MF	MF	MF	MF	MF	MF	
	<b>K6</b>	9-10	Comparing alternatives.	MF	MF	MF	MF	MF	MF	
	<b>K7</b>	11	Depreciation.	MF	MF	MF	MF	MF	MF	
	<b>K8</b>	12	Income tax.	MF	MF	MF	MF	MF	MF	
<b>K9</b>	13-14	Price changes and exchange rates.	MF	MF	MF	MF	MF	MF		
<b>Assessment Methods and Weights</b>	<b>No</b>	<b>Type</b>	<b>Weight</b>	<b>Implementation Rule</b>			<b>Make-up Rule</b>			
	<b>MF</b>	Midterm-Final	100%	At the time of the exam, books and all course materials are closed for use. Use of a calculator or any calculation devices are not allowed.			When a medical report or letter of appointment in accordance with the university procedure is submitted, a make-up exam is given for a maximum of one midterm exam.			
	<b>Q</b>	Quiz								
	<b>H</b>	Homeworks								
	<b>P</b>	Projects	-							
	<b>R</b>	Reports								
	<b>P</b>	Presentation								
	<b>A</b>	Attendance								
	<b>L</b>	Class/ Laboratory/ Field Work								
	<b>O</b>	Others								
<b>TOTAL</b>		100%								

**Determining Letter Grades**

- The letter grades will be determined based on one midterm and one final exam.
- In order to pass the course, the final score and the total average score of the student must be at least 50.

Assessment	Midterm	Final	TOTAL
Weight	40	60	100

**Teaching Method, Student Work Load**

**Time Applied by the Instructor**

No	Method	Explanation	Hours
1	Lectures	Lectures are given in class using the board or via presentations. Example questions are solved to enhance the concepts.	14x2=28
2	Problem Session/ Practice	Problems related to the course topics are solved on the board.	
3	Laboratory	Experiments are done in the laboratory or theoretical concepts covered during the lectures are practiced using computer exercises.	
4	Interactive Courses	Questions are asked to students during lectures and they are encouraged to guess the answers (peer learning is also in this category)	
5	Field Work	Students attend activities outside the campus.	
6	Midterm	Midterm exam is given during the midterm week.	2
7	Final	Final exam is given during the final exam week.	2

**Estimated Time to be Allocated by a Student**

8	Projects	The students carry out research about the problem given in the project, design and implement their solution and prepare a report.	
9	Homeworks	The students solve the problems given as homework.	
10	Pre-class learning of Course Material	The students study and learn the new subjects from course materials.	14x2=28
11	Review of Course Material	Students review the course subjects from course materials to prepare for the exams and homeworks.	30
12	Office Hour	Students ask questions to the instructor or the assistant during office hours.	2
<b>TOTAL</b>			<b>92</b>

**Academic Honesty**

Violations of scholastic honesty include, but are not limited to cheating, plagiarizing, fabricating information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students.

In case academic dishonesty is observed, the first authority is the instructor of the course. The instructor may decide to give the student zero for the homework(s)/lab(s)/exam(s), give the letter grade FF, or may take disciplinary action.