ECTS COURSE INFORMATION FORM

Faculty	**Faculty of Engineering**	
Program	**B.Sc. in Civil Engineering**	**Required**
	B.Sc. in Computer Engineering	**Required**
	B.Sc. in Electrical-Electronics Engineering	**Required**
	B.Sc. in Industrial Engineering	**Required**
	B.Sc. in Mechanical Engineering	**Required**

Course Code	HUM 300			
Course Title in English	Engineering Ethics			
Course Title in Turkish	Mühendislik Etiği			
Language of Instruction	English			
Type of Course	Lecture			
Level of Course	Undergraduate			
Course Category (by % of Content)	Basic Science	Basic Engineering	Engineering Design	General Education
	-	-	-	100
Semester Offered	Fall			
Contact Hours per Week	Lecture: 2 hours	Recitation: -	Lab: -	Other: -
Estimated Student Workload	85 hours			
Number of Credits	3 ECTS			
Grading Mode	Standard Letter Grade			
Pre-requisites	-			
Expected Prior Knowledge	-			
Co-requisites	-			
Registration Restrictions	-			
Overall Educational Objective	To learn general issues and basic principles of ethics, ethical problems that professions at different sectors face; attitudes of the professions especially engineers to the problems and the consequences of the different solutions			
Course Description	This course provides a compressive knowledge about the philosophy of the ethics. Different Types of Ethics (Normative Theories of Ethics, Anthropocentrism, Relativism, Monism, Post Modernism, etc.) and. Code of Ethics. Analyzing Exterior Acts and Interior Intentions. Truth and Fair Approach of Person to Person and Person to Social. Engineering Ethics and Design Problems and Design Hierarchy in Process. Moral Responsıbility-Trust Relatıonshıp Between Engıneers And Socıety. Moral Responsibility. Ethical Problems In Engineering- of a Consulting Engineer, of a Software Engineer, of an Engineer in Industry and of an Engineer in Government.			
Course Description in Turkish	Derste, genel etik felsefesi , değişik etik tiplerini ve yapılan hareketle planlanan niyet arasındaki ilişkiyi, kişinin başkasına ve topluma karşı gerçekleri şeffaflıkla açılklaması ve adil davranması konuları incelenecektir. Mühendislik mesleğinin topluma karşı sorumlulukları toplumla mühendisliğin birbirine olan karşılıklı güveni, kamu ve özel sektörde çalışan mühendislerin karşılaştıkları etik sorunları, aldıkları etik olmayan teklifler ve bu sorun ve tekliflere karşı sosyal sorumlulukları, davranışı ve bu davranışların neden olabileceği olumlu ve olumsuz sonuçlar vaka takdimleri ile irdelenecektir.			
Course Learning Outcomes and Competences	Upon successful completion of the course, the learner is expected to: 1. identify the different types and significance of ethics and why all the professions and especially engineers and scientists should study ethics; 2. understand the code of ethics and the significance of the compliance to the code of ethics as a moral responsibility; 3. understand the preferences and the expectations of the customers, give professional advices and fulfill the expectations of the customers without violating the code of ethics;			

	4. identify unethical applications and offers that engineers and scientists will face and the consequences of the different approaches to the problems and offers; 5. understand the significance of ethical behaviors and help the dissemination of ethical concept; 6. organize and deliver effective written and verbal communications; 7. function effectively in, and evaluate the composition, organization, and performance of a team.

Relationship of the Course with the Student Outcomes	Level	Learning Outcome(s)	Assessed by
Student Outcomes	N=None S=Supportive H=High		Exam, Project, HW, Experiment, Presentation, etc.
(1) an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics			
(2) an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors			
(3) an ability to communicate effectively with a range of audiences	S	6	Term Project Report (Presentation)
(4) an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts	H	1, 2, 3, 4, 5	Exams, Term Project
(5) an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives	S	7	Term Project
(6) an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions			
(7) an ability to acquire and apply new knowledge as needed, using appropriate learning strategies			

Prepared by and Date	Assistant Professor Utku Koç / August 2019	
Semester	Fall 2019-2020	
Name of Instructor	Prof. Günay Kocasoy	
Course Contents	Week	Topic
	1	Introduction to Philosophy of Ethics, Historical Development of Ethics
	2	Why to study Ethics and Different Types of Ethics (Normative Theories of Ethics, Anthropocentrism, Relativism, Monism, Post Modernism, etc.)
	3	Different Types of Ethics (Normative Theories of Ethics, Anthropocentrism, Relativism, Monism, Post Modernism, etc.) *(continued)*
	4	Code of Ethics
	5	Analyzing Exterior Acts and Interior Intentions-Case Studies
	6	Analyzing Exterior Acts and Interior Intentions-Case Studies *(continued)*
	7	Truth Person to Person; Person to Social
	8	Fairness Person to Person; Person to Social
	9	Moral Responsibility-Trust Relationship Between Engineers And Society
	10	Engineering Ethics in Design Process and Social Responsibility and Design Hierarchy
	11	Different Types of Ethical Problems and Solutions in Engineering – Case Studies
	12	Different Types of Ethical Problems and Solutions in Engineering – Case Studies
	13	Ethical Problems and Consequences of Solutions of the Consulting Engineers Ethical Problems and Consequences of Solutions of the Engineers in Industry
	14	Ethical Problems and Consequences of Solutions of the Engineers in Government

		Ethical Problems and Consequences of Solutions of the Software Engineers
	15	Final Exam/Project/Presentation Period
	16	Final Exam/Project/Presentation Period
Required/Recommended Readings	Kroes, P. A., Meijers, A., *Ethical Issues in Engineering Design; Safety and Sustainability*, ISBN-13:9789090199078; ISSN: 1574-94ıX, vol.2. Anke van Gorp, Delft, 2005. Alger, P.L., Christensin, N.A., Olmsted, S.P., *Ethical Problems in Engineering,* Library of Congress Catalog Card Number: 65-21448, John Wiley and Sons, New York, 1965.	
Teaching Methods	Lectures and class discussions	
Homework and Projects		
Laboratory Work	-	
Computer Use	-	
Other Activities	-	
Assessment Methods	Types of assessment — Ratio (%) Midterm Exam — 32 Project — 28 Final Exam — 40 Total — 100	
Course Administration	**Instructor's office and phone number:** 5th Floor **office hours:** Thursday 12:30-14:30 **email address:** **Missing a quiz:** Provided that proper documents of excuse are presented, each missed quiz by the student will be given a grade by taking the average of all of the other quizzes. No make-up will be given. **Missing a midterm:** Provided that proper documents of excuse are presented, each missed midterm by the student will be given the grade of the final exam. No make-up will be given. **Missing a final:** Faculty regulations. **A reminder of proper classroom behavior, code of student conduct**: YÖK Regulations **Statement on plagiarism**: YÖK Regulations	

ECTS Student Workload Estimation

Activity	No/Weeks	Hours			Calculation	Explanation
	s per Semester (A)	Preparing for the Activity (B)	Spent in the Activity Itself (C)	the Activity Requiremen ts (D)		
Lecture/Flipped Classroom	14	1	2		42	A*(B+C+D)
Quizzes					0	A*(B+C+D)
Midterm(s)	1	8	2		10	A*(B+C+D)
Project, Presentation	1	10	1		11	A*(B+C+D)
Final Examination	1	16	2		22	A*(B+C+D)
Total Workload					85	
Workload/25					3,4	
ECTS					**3**	