

School of Engineering and Natural Sciences / Industrial Engineering (English)

2023 - 2024 Academic Year

TECHNOLOGY, SOCIETY and ETHICS

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
TECHNOLOGY, SOCIETY and ETHICS	IND4210767	Spring Semester	2+0	2	2
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	English				
Course Level	First Cycle (Bachelor's Degree)				
Course Type	Required				
Course Coordinator	Prof.Dr. Talip ALP				
Name of Lecturer(s)	Prof.Dr. Talip ALP				
Assistant(s)					
Aim					
Course Content	This course contains; Science Before Science: Mesopotamia and Egypt ,The Land of the Greeks - Science and Scientific Method,The Roads to Baghdad - Research Concept,Abbasid Baghdad: The House of Wisdom - Research Processes,'Spiritual Physick' - Research Models,From Baghdad to Central Asia,The Cure of Ignorance - Data Collection in Research,Fatimid Cairo: The Science of Light - The Debates in Plagiarism,Ayyubid and Mamluk Cairo: Healing Body and Soul - Findings and Interpretation in Research,Ingenious Mechanical Devices - Results and Recommendations in Research,Islamic Technology ,Al-Andalus ,On Ethics,On Ethics.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
The student learn the development process of science and technology throughout history.			14, 9	A, E	
The student understandsthe impact of political will, social philosophy, financial support, encouragement and stability on the development of science and technology with concrete examples.			14, 16, 9	A, E	
The student see that the welfare and independence of society can only be sustainable thanks to modern science and superior technology.			14, 9	A, E	
The student is able to establish connections between contemporary science and technology, superior professional equipment and a successful economy in global competition.			14, 9	A, E	
5. Recognize scientific research techniques			10, 13, 16, 19, 9	A	
6. Evaluates the ethical rules in the publication process of scientific articles			10, 13, 16, 19, 9	A	
7. Plans the research project preparation process			10, 13, 16, 19, 9	A	
8. Applies ethical rules in scientific research and project preparation processes.			10, 13, 16, 19, 9	A	
9. Summarizes intellectual property rights			10, 13, 16, 19, 9	A	
Teaching Methods	10: Discussion Method, 13: Case Study Method, 14: Self Study Method, 16: Question - Answer Technique, 19: Brainstorming Technique, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam, E: Homework				
Lecture Schedule					
Sequenc e	Topics	Preliminary Preparation			
1	Science Before Science: Mesopotamia and Egypt				
2	The Land of the Greeks - Science and Scientific Method				
3	The Roads to Baghdad - Research Concept				
4	'Abbasid Baghdad: The House of Wisdom - Research Processes				
5	'Spiritual Physick' - Research Models				
6	From Baghdad to Central Asia				
7	The Cure of Ignorance - Data Collection in Research				
8	Fatimid Cairo: The Science of Light - The Debates in Plagiarism				
9	Ayyubid and Mamluk Cairo: Healing Body and Soul - Findings and Interpretation in Research				
10	Ingenious Mechanical Devices - Results and Recommendations in Research				
11	Islamic Technology				
12	Al-Andalus				
13	On Ethics				
14	On Ethics				
Evaluation Methods		Weight(%)			
Midterm Exam		30			
General Exam		70			

Resources	
John Freely , "Light from the East : How the Science of Medieval Islam Helped to Shape the Western World"	