ESOGÜ Mechanical Engineering Department
COURSE INFORMATION FORM

SEMESTER	Spring

COURSE CODE	151818694	COURSE NAME	Energy Economics

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
8	3	0	0	3	5	COMPULSORY ( ) ELECTIVE (X)	Turkish

COURSE CATAGORY			
Basic Science	Basic Engineering	Mechanical Engineering Profession [if it contains considerable design, mark with (√)]	Social Science
	X		

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	1st Mid-Term	1	40
	2nd Mid-Term		
	Quiz		
	Homework		
	Project		
	Report		
	Others (……)		
FINAL EXAM		1	60

PREREQUIEITE(S)	
COURSE DESCRIPTION	Understanding the dynamics of energy needs
COURSE OBJECTIVES	To teach the developments in the energy sector
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	Students have basic knowledge about energy economy
COURSE OUTCOMES	They can analyze issues related to energy economy.
TEXTBOOK	Energy Economy-Burcu Kılınç Savrul-Dora Publishing House
OTHER REFERENCES	Introduction to Energy Economy- Levent Aydın-Seçkin Publishing
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Energy Perspective, Date and Change of Location
2	Energy as an Economic Sector
3	Sustainable Energy Development
4	Energy Policies and Geopolitics
5	Energy Sources and Conversion
6	Introduction to Fossil Fuels and Coal
7	Crude Oil and Natural Gas
8	Lithosphere and Biosphere Originated Renewable Energy Sources: Geothermal and Biofuel
9	Atmospheric Renewable Energy Sources: Solar and Wind
10	Hydrospheric Renewable Energy Sources: Hydroelectric
11	Alternative Renewable Energy Sources: Gas Hydrates and Hydrogen, and Nuclear
12	Energy and Economic Policies
13	Energy and Economic Policies
14	Energy and Economic Policies
15,16	Final Examination

DİKKAT!... Aşağıdaki PROGRAM ÇIKTILARI Mühendislik için yazılmıştır. BÖLÜM kendi eğitim amaç ve hedeflerini destekleyen Program Çıktılarını belirledikten sonra bu kısım hazırlanmalıdır. ŞABLON OLARAK KULLANMAYINIZ

NO	PROGRAM OUTCOMES	3	2	1
1	Sufficient knowledge of engineering subjects related with mathematics, science and own branch; an ability to apply theoretical and practical knowledge on solving and modeling of engineering problems.	X		
2	Ability to determine, define, formulate and solve complex engineering problems; for that purpose an ability to select and use convenient analytical and experimental methods.		X	
3	Ability to design a complex system, a component and/or an engineering process under real life constrains or conditions, defined by environmental, economical and political problems; for that purpose an ability to apply modern design methods.			X
4	Ability to develop, select and use modern methods and tools required for engineering applications; ability to effective use of information technologies.		X	
5	In order to investigate engineering problems; ability to set up and conduct experiments and ability to analyze and interpretation of experimental results.			X
6	Ability to work effectively in inner or multi-disciplinary teams; proficiency of interdependence.	X		
7	Ability to communicate in written and oral forms in Turkish/English; proficiency at least one foreign language.		X	
8	Awareness of life-long learning; ability to reach information; follow developments in science and technology and continuous self-improvement.	X		
9	Understanding of professional and ethical issues and taking responsibility		X	
10	Awareness of project, risk and change management; awareness of entrepreneurship, innovativeness and sustainable development.		X	
11	Knowledge of actual problems and effects of engineering applications on health, environment and security in global and social scale; an awareness of juridical results of engineering solutions.		X	
1:None. **2**:Partially contribution. **3**: Completely contribution.				

Instructor(s): Res.Assist. Dr. Özge Yetik

Signature: **Date:**

29/05/2021