ESOGÜ Mechanical Engineering Department

COURSE INFORMATION FORM

SEMESTER	FALL

COURSE CODE	151817426	COURSE NAME	Transport Technique

SEMESTER	WEEKLY COURSE PERIOD			Course of		
	Lecture	Practice	Laboratory	Credit	ECTS	TYPE
7	3	0	0	3	5	NON-SELECTIVE () SELECTIVE (×)

COURSE CATEGORY			
Math. and Basic Sciences	Professional Subjects [Put (√) below, if course contains considerable design.]	General	Other
×	(√)		

ASSESSMENT CRITERIA			
	Type	Quantity	%
MID-TERM EXAM	1st Mid-Term Exam.	1	10
	2nd Mid-Term Exam.	1	20
	Quiz		
	Homework	1	20
	Project		
	Report		
	Other (……)		
FINAL EXAM.		1	50

PREREQUISITE(S) OF COURSE	Strength of the materials, Mechanics
COURSE DESCRIPTION	Introducing of lifting, handling and transfer machines used in industry; criteria for selecting the appropriate economic system for their capacity; selection of cranes, hoists, elevators, conveyor belts, moving belts and augers elements to the standards; Turkish and international standards on issues; periodic maintenance and inspection procedures on removal, transport and transfer machines;
COURSE OBJECTIVES	Distribution of the course topics to each student at the beginning of the period to make a presentation at the end of the period; teach the all details of the lifting, handling and transfer systems are used in all areas except land, sea and air transport; show the selection and use of standards in all these issues; transfer the practical information about of industrial organizations; create a solid infrastructure to the engineers, who work in this regard after graduation, to have no difficulty in enterprises;
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUCATION	An important undergraduate course within vocational course.
COURSE OUTCOMES	create a solid infrastructure students who will work in the industry on the subject; explain the importance of transport technique, introduce tools used in this regard, explain its importance in the application
TEXTBOOK	DEMİRSOY, M., Transport Tekniği, Cilt I, II, III, 1993
OTHER REFERENCES	1- AŞIK, E., Bandlı Konveyörler, Hesap ve Konstrüksiyon Esasları, T.M.M.O.B. yayın no : 98. 2- Konularla ilgili çeşitli Türk ve yabancı standartlar. Konularla ilgili periyodikler, dergiler, imalatçı firma katalogları.
TOOLS AND EQUIPMENTS	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Introduction to Transport Technique; its applications; lifting, handling and transfer types
2	The definition of crane and tackle; classifications according to various criteria,
3	Overhead crane and its components, strength calculations and design of beams
4	Methods of selecting and calculating and of design wheels and rails
5	Grouping and analysis of drive systems, introducing the elements of load holding
6	Midterm I
7	Wire and fiber ropes, calculation and selection criteria for the rope
8	Wire rope drive pulleys, drums, mechanics of pulleys and pulley systems
9	Components of chains and elevator systems, calculation and design criteria
10	Continuous handling equipment (conveyors Band, marching bands, spirals), calculation and design criteria
11	Midterm II
12	A. C. , D.C. motors used in transport machines
13	Analysis of braking systems used in transport machines, periodic inspection and maintenance of lifting, handling and transfer systems
14	Seminar
15,16	

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 ~~modeling~~ 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; 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.				

Lecturer:

Signature: **Date:**