

MM 541 Industrial Air-Conditioning				MECHANICAL ENGINEERING DEPARTMENT					
Semester	Methods of Education							Credits	
	Lecture	Recit.	Lab.	Project/Field Study	Homework	Other	Total	Credit	ECTS credit
1,2	42				30	24	96	3	7.5
Language	Turkish								
Compulsory / Elective	Optional								
Prerequisites	-								
Course Contents	Basic definitions, summer and winter air-conditioning, refrigerants, load calculations and distribution; fan, duct design and diffusion apparatus for producing comfort. Air-conditioning methods and equipment, control. Selection of units for the design work, methods of development studies, air conditioning industries.								
Course Objectives	This course is intended to familiarize the students with the air-conditioning systems, and their calculations.								
Learning Outcomes and Competences	Understanding of the air-conditioning systems.								
Textbook and /or Reference	1. "Heating and Air Conditioning of Buildings", D.R. Oughton and S. Hodkins, 9th Edn., Butterworth and Heinemann, 2002. 2. Air Conditioning Engineering, W.P. Jones, 5th Edn., Butterworth and Heinemann, 2001.								
Assessment Criteria					If any, mark as (X)		Percentage (%)		
	Midterm Exams				X		28		
	Quizzes								
	Homeworks				X		12		
	Projects								
	Term Paper								
	Laboratory Work								
	Other								
	Final Exam				X		60		
Instructors	Assist. Prof. Oguz TURGUT								
Week	Subject								
1	Basic definitions								
2	Summer and winter air-conditioning								
3	Refrigerants								
4	Load calculations and distribution								
5	Load calculations and distribution								
6	Fan, duct design and diffusion apparatus for producing comfort								
7	Air-conditioning methods and equipment control.								
8	Air-conditioning methods and equipment control.								
9	Midterm I								
10	Selection of units for the design work								
11	Selection of units for the design work								
12	Methods of development studies								
13	Air conditioning industries								
14	Midterm II								