DOMESTIC REFRIGERATION SYSTEMS

1	Course Title:	DOMESTIC REFRIGERATION SYSTEMS
2	Course Code:	İSOZ102
3	Type of Course:	Compulsory
4	Level of Course:	Short Cycle
5	Year of Study:	1
6	Semester:	2
7	ECTS Credits Allocated:	5.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	2.00
10	Laboratory (hour/week):	0
11	Prerequisites:	No
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Öğr. Gör. AHMET ATAMAN
15	Course Lecturers:	Meslek Yüksekokulları Yönetim Kurullarının görevlendirdiği öğretim elemanları.
16	Contact information of the Course Coordinator:	ahmetataman@uludag.edu.tr 02242942395-42394 Bursa Uludağ Üniversitesi Görükle Yerleşkesi Teknik Bilimler MYO
17	Website:	
18	Objective of the Course:	In this course the purpose is have proficiency for assembly a domestic air conditioning systems which is include vapor compression refrigeration cycle to student.
19	Contribution of the Course to Professional Development:	To follow the developments related to the profession and to improve herself continuously
20	Learning Outcomes:	
	1	To make assembly preparation for a domestic air conditioning systems
	2	To learn components of air conditioning systems and their’s functions
	3	To assembly components of air conditioning systems
	4	To assembly electrical components
	5	To learn properties of refrigerant
	6	To load refrigerant
	7	To operate refrigeration cycle
	8	To evaluate performance of refrigeration cycle
	9	
	10	
21	Course Content:	

Course Content:

Week	Theoretical	Practice
1	Components of assembling cabin Refrigeration systems	To know assembling techniques To determine system components

2	Assembling of compressor	To connect, To isolate, To use hand instruments
3	Assembling of condensor Assembling of evaporator	To use hand instruments To use hand instruments for cupper pipe To make weld
4	Assembling of filter and dryer Assembling of capillary tube	To use hand instruments To use hand instruments for cupper pipe To make weld To cut capillary tube
5	Thermal switch and relay connection	To use hand instruments To connect cables To use electrical measurement device
6	Connection of capacitor, Connection of thermostat Sensors	To use hand instruments To connect cables To use electrical measurement device
7	Connection of fan	To use hand instruments To connect cables To use electrical measurement device
8	Repeating courses and midterm exam	
9	Refrigerants	To select a refrigerant
12	Electrical connection of system Operation of system	To use hand instruments To connect cables To read value
	Valuing of pressure	To connect digital thermometers To read temperature To read pressure
	Pressure- Enthalpy diyagram COP	To use electrical measurement device To read P-h diagram To use P-h diagram To read tables
22	Textbooks, References and/or Other Materials:	Soğutma Tekniği Ve Uygulamaları, Recep Yamankaradeniz, Lecturer notes
23	Assesment	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	14	3.00	42.00
Homeworks	7	2.00	14.00
Projects	2	14.00	28.00
Field Studies	0	0.00	0.00
Midterm exams	1	2.00	2.00
Others	1	2.00	2.00
Final Exams	1	2.00	2.00
Total Work Load			146.00
Total work load/ 30 hr			4.87
ECTS Credit of the Course			5.00

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00

Final Exam	1	60.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		Measurement and evaluation is carried out according to the priciples of Bursa uludag University Associate and Undergraduate Education Regulation.

24 ECTS / WORK LOAD TABLE

25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS

	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	4	5	5	4	5	1	5	1	3	3	1	2	0	0	0	0
ÖK2	5	3	5	3	5	1	5	2	3	1	1	2	0	0	0	0
ÖK3	3	5	5	3	4	1	5	1	3	3	1	2	0	0	0	0
ÖK4	3	5	5	5	4	1	5	1	3	3	1	2	0	0	0	0
ÖK5	5	5	4	2	5	1	5	2	4	1	1	3	0	0	0	0
ÖK6	3	5	4	2	5	1	5	1	3	3	1	2	0	0	0	0
ÖK7	3	5	4	4	3	1	5	1	2	1	1	2	0	0	0	0
ÖK8	5	3	4	3	5	1	5	4	4	1	1	3	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**