

**KTÜ 2020/2021BAHAR YIYILI DERS İZLEME FORMU**

DERS							SINAVLAR				
Ders Kodu ve Adı	ME 3000 HEAT TRANSFER/A			Sınav Adı	Tarih	Saati	Yeri	Katkı Oranı (%)			
Dönemi	Bahar			1. Ara Sınavı				50			
Saat / Hafta	4			2. Ara Sınavı	xxxx	xxx	xxxx				
Ders Görevlisi	Prof. Dr. Mehmet Emin ARICI/A Dr. Öğr. Üyesi Özgür AYDIN/B			Kısa Sınavlar (Quiz)							
Ders Yardımcısı											
Yazılan Öğ Sayısı											
Ders Günü	Saati	Yeri		Ödev							
Salı	13.00-15.00	D4		Özür Sınavı							
Çarşamba	09.00-11.00	D6		Yarıyıl Sonu Sınavı				50			
DERS PLANI											
Hafta	Tarih	İşlenecek Konu veya Yapılacak İşler									
1	22.02.2022 23.02.2022	<b>Introduction:</b> Physical origins and rate equations. Conservation of energy requirement									
2	01.03.2022 01.03.2022	<b>Introduction to Conduction:</b> Conduction rate equation. Thermal properties of matter. Heat diffusion equation									
3	08.03.2022 09.03.2022	<b>Introduction to Conduction:</b> Boundary and initial conditions <b>One Dimensional, Steady-State Conduction:</b> Plane wall									
4	15.03.2022 16.03.2022	<b>One Dimensional, Steady-State Conduction:</b> Radial systems									
5	22.03.2022 23.03.2022	<b>One Dimensional, Steady-State Conduction:</b> Conduction with thermal energy generation									
6	29.03.2022 30.03.2022	<b>One Dimensional, Steady-State Conduction:</b> Heat transfer from extended surfaces									
7	05.04.2022 06.04.2022	<b>Two-Dimensional, Steady-State Conduction:</b> Method of separation of variables, Finite-difference equations									
8	12.04.2024 13.04.2022	<b>Transient Conduction:</b> Lumped capacitance method									
9		<b>MIDTERM EXAM</b>									
10	26.04.2022 27.04.2022	<b>Transient Conduction:</b> Spatial effects; approximate solutions									
11	03.05.2022 04.05.2022	<b>RAMAZAN BAYRAMI</b>									
12	10.05.2022 11.05.2022	<b>External Flow:</b> Flat plate in parallel flow. Cylinder sphere in cross flow									
13	17.05.2022 18.05.2022	<b>Internal Flow:</b> Hydrodynamic considerations. Thermal considerations. The energy balance									
14	24.05.2022 25.05.2022	<b>Internal Flow:</b> Laminar flow in circular tubes. Turbulent flow in circular tubes									
15	31.05.2022 01.06.2022	<b>Natural Convection:</b> Introduction to natural convection. <b>Radiation heat transfer:</b> Radiative properties, the view factor and the radiation exchange between surfaces									
16		<b>FINL EXAM</b>									

**Textbook: Fundamentals of Heat and Mass Transfer  
Frank P. Incropera & David DeWitt**