



**Yildiz Technical University**

**Mechanical Engineering Faculty – Department of Mechanical Engineering**

**HEAT TRANSFER 1 AUTUMN 2022-2023**

Monday 14:00-16:00

Tuesday 13:00-14:00

Lecturer: Assoc. Prof. Dr. Özgen Açıkgoz

1. Introduction and Basic Concepts (Chapter 1)
  2. Heat Conduction Equation (Chapter 2)
  3. Steady Heat Conduction (Chapter 3)
  4. Steady Heat Conduction + Transient Heat Conduction (Chapter 3 + Chapter 4) (**Out of course hour, a practice hour will be conducted, link will be provided**)
  5. Transient Heat Conduction (Chapter 4) **Quiz 1**
  6. Fundamentals of Convection (Chapter 6)
  7. External Forced Convection (Chapter 7) (**Out of course hour, a practice hour will be conducted, link will be provided**)
  8. **Midterm Exam**
  9. External Forced Convection + Internal Forced Convection (Chapter 7 + Chapter 8)
  10. Internal Forced Convection (Chapter 8)
  11. Natural Convection (Chapter 9) (**Out of course hour, a practice hour will be conducted, link will be provided**)
  12. Boiling and Condensation (Chapter 10) **Quiz 2**
  13. Heat Exchangers (Chapter 11)
  14. Fundamentals of Thermal Radiation + Radiation Heat Transfer (Chapter 12 + Chapter 13) (**Out of course hour, a practice hour will be conducted, link will be provided**)
- FİNAL SINAVI**

Course Books:	<b>Heat and Mass Transfer</b> , Yunus A. Çengel <b>Fundamentals of Heat and Mass Transfer</b> , Frank P. Incropera, David P. DeWitt, John Wiley	
Grading:	15 % Quiz1 15 % Quiz2 30 % Yıl İçi Sınavı 40 % Final Sınavı	
Notes:	<ul style="list-style-type: none"><li>• Obtaining one of the course books is compulsory. The lectures will be issued by following the book, and chapters that shall be issued are encouraged to be read prior to the lecture.</li><li>• Exams shall be implemented open book.</li></ul>	