

YILDIZ TECHNICAL UNIVERSITY
MECHANICAL ENGINEERING DEPARTMENT

CONDUCTION HEAT TRANSFER

Instructor : Prof. Dr. Hakan Demir

Contact info : hdemir@yildiz.edu.tr

Web site : <http://avesis.yildiz.edu.tr/hdemir/>

- Heat Conduction Fundamentals
- Differential Equation of Heat Conduction, General Boundary Conditions and Initial Condition for the Heat Equation
- One Dimensional Steady Conduction, Thermal Resistance Networks
- Extended Surfaces
- Bessel's Equation
- Separation of Variables
- Superposition
- Laplace Transformations
- Normalization
- Finite Differences

<i>References:</i>	M. Necati Özışık, Heat Conduction, John Wiley & Sons Vedat S. Arpacı, Conduction Heat Transfer, Addison-Wesley
<i>Grading:</i>	30% Homework I 30% Homework II 40% Final Exam (Take-home)
<i>Notes:</i>	