# Cankaya University

# **Faculty of Engineering**

# Mechanical Engineering department

## ME 613 Advanced Heat Transfer

## Spring 2019

### **SYLLABUS**

- 1- Foundations of convective heat transfer
- 2- Fundamental equations of convective heat transfer
- 3- Governing equations of incompressible external laminar boundary layers
- 4- Integral methods for convective heat transfer
- 5- Dimensional analysis
- 6- Laminar convective heat transfer in incompressible external boundary layers
- 7- One-dimensional laminar convective heat transfer in channels
- 8- Laminar convective heat transfer in channels
- 9- Free convection heat transfer
- 10-Turbulent flow