

ME 511 involves conduction in cylinders and rectangular slabs in bounded domains under the appropriate initial and boundary conditions. The course deals with transient and steady-state solutions to the linear (partial differential) conduction equation. The solutions are mostly obtained by separation of variables involving periodic and Bessel functions, depending on the geometry. We also cover nondimensionalization of equations and periodic boundary conditions. The book is Meyers: *Analytical Methods in Conduction Heat Transfer*.