MECH6374 - Conductive and Radiative Heat Transfer

MECH 6374 Conductive and Radiative Heat Transfer (3 semester credit hours) Advanced conduction heat transfer followed by advanced radiation heat transfer. Emphasis on fundamental concepts of conduction/diffusion in heat and mass transfer including solving differential equations related to conduction. Radiation heat transfer covering black and non-black surfaces, shape factors, radiation exchange in gray diffuse enclosures, and solution methods for integro-differential equations. Multi-mode heat transfer combining conduction and radiation is also covered. (3-0) R