

Course Number and Name													
BME6L1 – HEAT TRANSFER LAB													
Credits and Contact Hours													
2 & 45													
Course Coordinator's Name													
Mr.Ravi													
Text Books and References													
Lab Manual													
Course Description													
To make the students to understand heat transfer characteristics materials and equipment.													
Prerequisites							Co-requisites						
Thermal lab							Nil						
required, elective, or selected elective (as per Table 5-1)													
Required													
Course Outcomes (COs)													
CO1		To understand the mechanisms of heat transfer under steady and transient conditions.											
CO2		To understand the concepts of heat transfer through extended surfaces.											
CO3		To learn the thermal analysis and sizing of heat exchangers and to understand the basic											
CO4		The students can able to understand different heat transfer equipments											
CO5		Apply different heat and mass transfer principles of different applications.											
CO6		Will practically know about wind tunnel											
Student Outcomes (SOs) from Criterion 3 covered by this Course													
	COs/SOs	a	b	c	d	e	f	g	h	i	j	k	l
	CO1	H							M			L	
	CO2	H							M			L	
	CO3			H	H	H						L	
	CO4					M						L	L
	CO5					M							L
	CO6						M	M	M				L

List of Topics Covered

LIST OF EXPERIMENTS:

1. Thermal conductivity of insulating materials
2. Thermal conductivity of guarded hot plate method
3. Heat transfer through composite wall
4. Heat transfer by free and forced convection
5. Test on heat exchangers- parallel and counter flow
6. Emissivity measurement apparatus
7. Heat transfer from fins-natural and forced convection
8. Stefan-Boltzman apparatus
9. Test on Pinfin apparatus
10. Study on Wind tunnel- Drag and lift measurement