CS354	COMPUTER NETWORKS LAB	PCC	0 – 0 – 3	2 Credits

Pre-requisites: None.

Course Outcomes: At the end of the course the student will be able to:

CO1	Develop programs for client-server applications
CO2	Perform packet sniffing and analyze packets in network traffic.
CO3	Implement error detecting and correcting codes

Mapping of course outcomes with program outcomes

Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	2	2	2	2					2
CO2	1	1	2	2		2			
CO3	2	2						2	

Detailed syllabus:

Assinment-1 Programs to implement error correction and detection

Assinment-2 Programs for IP address conversion function

Assignment-3 Client server applications using inter process communication and synchronous mechanisms

     a)FIFO

     b)Message queues

     c)Shared memory

Assignment-4 Connection oriented Client server applications with TCP

Assignment-5 Connectionless Client server applications with UDP

Assignment-6 Programs using RPC remote procedure call

Assignment-7 client server applications using cocurrent server

Assignment-8 client server applications using Multi protocol server

Assignment-9 client server applications using super server

Assignment-10 Implement a chat and mail server

Reading:

1. W. Richard Stevens, *UNIX Network Programming, Volume 1, Second Edition: Networking APIs: Sockets and XTI*, Prentice Hall, 1998
2. W. Richard Stevens, *UNIX Network Programming, Volume 2, Second Edition: Interprocess Communications*, Prentice Hall, 1999
3. W. Richard Stevens, Stephen Rago, *Advanced Programming in the UNIX Environment*, Pearson Education, 2/e