

Course Title	System and Network Administration Lab
Course Code	DI-323L
Credit Hours	1
Category	Domain Core
Prerequisite	CC-311: Operating Systems
Co-Requisite	None
Follow-up	None
Course Description	<p>Introduction: Review of computer networks lab, Server Environment (Microsoft and Linux). Installation and Configuration: Client Server OS Configuration, Installation and configuration of servers, Linux Installation and Verification, Installation of Activity Directory on Domain Controller, Manage and Active Directory Forest and domain. Managing Network Services: Network Monitoring Tools. Boot Management and Process Management. IP Tables and Filtering. Securing Network Traffic. Advanced File Systems and Logs. Bash Shell Scripting. Managing Servers: FTP, NFS, Samba, DHCP, DNS and Apache. Configuring Local Services and Managing Basic System Issues. Administer Users and Groups. Domain controller. Installation and Configuration of Wireless Access Points: Installation and configuration if wireless Router, Manageable and non-manageable Cisco switches, Concept and configuration of VLAN, Switch modes and operations, setting up WAN on simulator, identifying necessary devices to build a WAN, learning static and dynamic routing protocols, Understanding and implementing RIP (Routing Information Protocol). Understanding and implementing IGRP, ACL's configuration on routers.</p>
Text Book(s)	<ol style="list-style-type: none"> 1. The Practice of System and Network Administration, Second Edition by Thomas Limoncelli, Christina Hogan and Strata Chalup, Addison-Wesley Professional; 2nd Edition (2007). ISBN-10: 0321492668. 2. Study guide for Practice of System and Network Administration by Thomas A. Limoncelli, Cram101; 2nd Edition (2011). ISBN-10: 1428851755. 3. Networking Systems Design and Development by Lee Chao, CRC Press; 1st Edition (December 21, 2009). ISBN-10: 142009159X (TB2).
Reference Material	<ol style="list-style-type: none"> 1. Red Hat Enterprise Linux 6 Bible: Administering Enterprise Linux Systems by William von Hagen, 2011.