Lesson Plan

**BCA III semester**

**BCA-364: Internet Technologies**

Teacher name:

April 2021

|  |
| --- |
| Internet: Introduction; History; Internet Services; TCP/IP: Architecture, Layers, Protocols; TCP/IP model versus OSI Model; World Wide Web (WWW) - The Client Side, The Server Side, Creating and Searching Information on the Web, Popular Search Engines, URL, HTTP, Web Browsers, Chat & Bulletin Board, USENET & NNTP (Network News Transfer Protocol); Internet vs. Intranet; |

May 2021

|  |
| --- |
| TCP, UDP and IP Protocols, Port Numbers; Format of TCP, UDP and IP; IPv4 addressing; The need for IPv6; IPv6 addressing and packet format; TCP Services; TCP Connection Management; Remote Procedure Call; IP Address Resolution- DNS; Domain Name Space; DNS Mapping; Recursive and Iterative Resolution; Mapping Internet Addresses to Physical Addresses: ARP, RARP, DHCP; ICMP; IGMP; |

June 2021

|  |
| --- |
| Application Layer: Electronic Mail: Architecture; Protocols - SMTP, MIME, POP, IMAP; Web Based Mail; File Access and Transfer: FTP, Anonymous FTP, TFTP, NFS; Remote Login using TELNET; Voice and Video over IP: RTP, RTCP, IP Telephony and Signaling, RSVP;  Routing in Internet: RIP, OSPF, BGP; Internet Multicasting; Mobile IP; Private Network  Interconnection: Network Address Translation (NAT), Virtual Private Network (VPN); Internet  Management and SNMP; Internet Security: E-Mail Security; |

July 2021

|  |
| --- |
| Web Security; Firewall; Introduction to IPSec and SSL; |