ADVANCED INTERNETWORKING

INSTRUCTOR

Asst. Prof. Sibel Tarıyan Özyer Office: L-204 E mail: tariyan@cankaya.edu.tr

COURSE DESCRIPTION

The course covers routing algorithms and their configuration in deep. This includes both static and dynamic routing algorithms.

The topics covered in static routing are:

- Building the routing table.
- Path determination
- Switching functions of a router.

In dynamic routing the topics are:

- Metrics and administrative distances.
- Distance Vector Routing Protocols: RIPv1 and RIPv2.
- EIGRP operation and configuration.
- Link-State Routing Protocols: OSPFv2 operation and configuration.

The course also covers variable length subnet masking and CIDR, configuring and troubleshooting network devices and resolving common issues with data link protocols

COURSE DESCRIPTION

Week1: Introduction
Week2: Introduction
Week3: Routing Concepts (Chapter1)
Week4: Static Routing (Chapter2)
Week5: Dynamic Routing (Chapter3)
Week6: Introduction to Switched Networks (Chapter4)
Week7: Review
Week8: Switch Configuration (Chapter5)
Week9: VLANs (Chapter6)
Week10: Access Control Lists (Chapter7)
Week11: DHCP (Chapter8)
Week12: Network Address Translation for IPv4 (Chapter9)
Week13: Device Discovery, Management, and Maintenance (Chapter 10)
Week14: Review

GRADING

Chapter Exams (30%), Midterm/Project (30%), Final (40%)