



ESCUELA SUPERIOR POLITÉCNICA DEL LITORAL

COURSE SYLLABUS

DATA NETWORKS

Printed by: gvsaltos

Program: Computer Science

1. Course number and name

TLMG1001 - DATA NETWORKS

2. Credits and contact hours

3 credits and 4 contact hours

3. Instructor's course or coordinator's name

JOSE EDUARDO CORDOVA GARCIA

4. Text book, title, author, and year

*Kurose J., Ross K.. Computer Networking: A Top-Down Approach (7ma)

a. Other supplemental materials

*Cisco Networking Academy. Switched Networks Companion Guide (Primera Edición)

*William Stallings. Data and Computer Communications (10th Edition) (10)

*Tanenbaum, A., Wetherall, D.. Computer Networks (5)

5. Specific course information

a. Brief description of the content of the course (catalog description)

This course presents a general description of data communication networks considering the advantages of applying reference models for their definition. A particular emphasis is made on routing protocols and reliable data transfer. Also, it presents criteria for the design, implementation, operation and maintenance of local area networks. Finally, modern network systems and applications are presented.

b. This course is a: Required

6. Specific goals for the course

a. Specific outcomes of instruction

1.- Identify intermediary and end communication devices to be used in the design of data network topologies.

2.- Define planning, design, installation, and operation tasks to deploy data networks.

3.- Analyze data networks to identify problems that affect their operation.

b. Explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course

7. Brief list of topics to be covered

1.- Introduction to data networks

2.- Data transmission over shared media

3.- Data routing and addressing

4.- Reliable data transfer

5.- Network applications and services

6.- Modern data networks