Southeast Missouri State University

Department of Management

Course No. MG420

Title of Course: Telecommunication Management

Spring 2000

I. Catalog Description and Credit Hours of Course:

This is an introductory course on the topic of data communications and networking concepts, components, architectures, protocols, and standards used for transmitting information within a network. (3)

II. Prerequisites(s): MG375 Management Information Systems with a minimum grade of “C”

III. Purposes or Objectives of the Course:

Upon completion of this course, the student should be able to:

A. Describe Local Area Networks and provide examples of their use and design in the business environment.

B. Describe Wide Area Networks and provide examples of their use and design in the business environment.

C. Describe and demonstrate examples of the different layers of a network system.

D. Plan, design, and provide a cost analysis of a network system.

IV. Expectations of Students:

A. Students will complete all assigned readings in textbook, handouts and relevant professional journal articles.

B. Students will participate in classroom discussions and activities.

C. Students will demonstrate achievement of course objectives through exams and projects.

D. Students will develop a group project in which they will design and provide a cost analysis for a specified network configuration.

E. Students will read and summarize two professional publication articles each week in order to gain insight into industry trends and standards.

V. Course Content or Outline:

A. Introduction to Data Communications (3)

B. Network applications (3)

C. Fundamentals (7)
1. Physical layer: Architectures, devices, and circuits
2. Physical layer: Data transmission
3. Data link layer
4. Network layer

D. Networking Infrastructure (8)

1. Local Area Network operating systems
2. Wide Area Networking concepts, architectures, and services
3. Remote access and wireless networking

E. Network Management (9)

1. Network design
2. Network management
3. Network security

F. Client/Server Application Development and Deployment (9)

1. Client/server groupware
2. Middleware
3. Integration of Internet, Intranet, and Web-based technologies with client/server systems

G. Emerging Technologies and the Future of Data Communications (6)

VI. Textbook(s) and/or Other Required Materials or Equipment:

A. Textbooks


B. Professional Journal Publications

C. Other References as Needed

VII. Basis for Student Evaluation:

A. Quizzes/Tests

B. Homework assignments and weekly article summaries

C. Group project
D. Classroom participation