

Date Adopted: _____

Date Reviewed: Feb 2014

Date Revised: Feb 2014

CIS 161 Introduction to Network Communications

I. CIS 161 - Introduction to Network Communications– 3 Semester Hours

II. Course Description

This course is designed to introduce students to basic concepts of computer networks. Emphasis is placed on terminology and technology involved in implementing selected networked systems. The course covers various network models, topologies, communications protocols, transmission media, networking hardware and software, and network troubleshooting. Students gain hands-on experience in basic networking.

III. Prerequisite

CIS 130 or equivalent background

IV. Textbook

Textbook: Networking Fundamentals, Second Edition

Publisher: Goodheart-Willcox Co., Inc.

Author: Roberts, Richard M.

V. Course Objectives

1. Explain basic concepts related to networking.
2. Install, configure, and troubleshoot network hardware.
3. Install and configure network operating systems.

VI. Course Outline of Topics

1. Explain basic concepts related to networking.
 - a. Networking terms and concepts
 - b. Network certifications
 - c. Network components
 - d. Network standards
 - e. OSI model
 - f. Network protocols
 - g. Network topologies
2. Install, configure, and troubleshoot network hardware.
 - a. Characteristics of connectivity
 - b. Tools and Support equipment
 - c. Networking media
 - d. Hardware installation and configuration
 - i. Device drivers
 - ii. Wired
 - iii. Wireless
 - e. Troubleshooting network hardware and connectivity
 - i. Resources
 - ii. Processes
 - iii. Documentation
 - f. Preventive maintenance
 - g. Monitoring performance

3. Install and configure network operating systems.
 - a. Functions of network operating systems
 - b. Installing and configuring network operating systems
 - c. Network Administration
 - i. Creating resource shares
 - ii. Creating accounts.
 - iii. Ensuring network security
 - d. Basic network operating system troubleshooting
 - i. Resources
 - ii. Documentation

VII. Evaluation and Assessment

Evaluation and assessment will be determined by the instructor and specified on the instructor's class syllabus. Grades will be based upon following scale: A = 90 – 100%, B = 80 – 89%, C = 70 – 79%, D = 60 – 69%, and F = below 60%.

VIII. Attendance

Students are expected to attend all classes for which they are registered. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from that class before poor attendance interferes with the student's ability to achieve the objectives required in the course. Withdrawal from class can affect eligibility for federal financial aid.

IX. Statement on Discrimination/Harassment

The College and the Alabama State Board of Education are committed to providing both employment and educational environments free of harassment or discrimination related to an individual's race, color, gender, religion, national origin, age, or disability. Such harassment is a violation of State Board of Education policy. Any practice or behavior that constitutes harassment or discrimination will not be tolerated.

X. Americans with Disabilities

The Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act of 1990 state that qualified students with disabilities who meet the essential functions and academic requirements are entitled to reasonable accommodations. It is the student's responsibility to provide appropriate disability documentation to the College. The ADA Accommodations Office is in FSC 305 (205-856-7731).