



CIS 2153

Division: Career and Technical Education

Department: Information Technology

Course: CIS 2153

Title: Internetworking I

Catalog Description:

This course will introduce students to the fundamentals of network cabling concepts. Students will become familiar with cabling basics, grounding and bonding, installation, distribution systems, termination and splicing, fire stopping, and troubleshooting.

General Education Requirements: N/A

Semesters Offered: TBA

Credit/Time Requirement: Credit: 3; Lecture: 3; Lab: 1

Clock/Hour Requirements: 60

Offered for Non-Credit: Yes

Prerequisites: CIS 1140

Corequisites: N/A

Justification:

Cabling is the backbone of every network. Students who choose to work in the IT fields will benefit greatly from a solid understanding and a working set of skills in the cabling field. This course prepares students for job readiness at graduation and/or transfer to some advanced training institutions and has been recommended by the program advisory committee.

Student Learning Outcomes:

Through successful completion of this course, students will:

- demonstrate proper procedures for grounding and bonding
- identify specific types of cables and how they fit into cabling infrastructure
- demonstrate proper technique in installing cables and supporting structures
- identify and describe backbone and horizontal distribution systems
- perform cable termination and splicing
- explain the importance of fire stopping and comprehensive fire protection systems
- participate in field testing and participate in standardized troubleshooting of cabling systems.

Content:

Course objectives will be accomplished by providing students with learning experiences in the following areas:

- grounding and bonding
- cables and the cabling infrastructure
- installing cables and supporting structures
- backbone and horizontal distribution systems
- cable termination and splicing
- fire stopping and comprehensive fire protection systems
- field testing and troubleshooting.

General Education Outcomes:

Applied Education Outcomes:

1) Students will acquire entry-level skills specific to and appropriate for employment in their chosen field of study.

Students will acquire entry-level skills specific to administering LANs and WANs in real-world environments.

Key Performance Indicators:

Student Learning Outcomes will be assessed by two or more of the following Key Performance Indicators:

- lab exercises
- quizzes
- tests
- exam or project.
- subsequent classes where students are expected to be familiar with Network Cabling Fundamentals
- the BICSI Level 1 Installer exam.

Representative Text and/or Supplies:

- Testout Labsim software - CCNA Cisco Certification

Optimum Class Size: 16

Maximum Class Size: 16

Signatures:

I hereby submit this course syllabus:

Michael P. Medley, MBA, Assistant Professor

I hereby find this course consistent with the goals and resources of the Information Technology Department:

Michael P. Medley, MBA, Assistant Professor, Chair

I hereby find this course consistent with the goals and resources of the Career and Technical Education Division:

Michael P. Medley, MBA, Assistant Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

Michelle Olsen, MLS, Campus Librarian (Richfield Campus)