



## CIS 2153

**Division:** Career and Technical Education

**Department:** Computer Information Systems

**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, firestopping, 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 firestopping 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
- Firestopping and Comprehensive Fire Protection Systems
- Field Testing and Troubleshooting.

**General Education Outcomes:**

**Key Performance Indicators:**

**In class:**

- Student grades will be based on a combination of lab exercises(5-25%), quizzes (5-25%), tests (10-50%), and a final exam or project (20-50%). Percentages are approximate.

**Following class:**

- Post evaluation will be measured by subsequent student performance in courses where students are expected to be familiar with Network Cabling Fundamentals. If students choose to pursue industry certification, the BICSI Level 1 Installer exam may provide indicators as to student success in this course.

**Representative Text and/or Supplies:**

- Beth Verity, *Guide to Network Cabling Fundamentals* , current edition, Thomson.

**Optimum Class Size:** 16

**Maximum Class Size:** 16

**Signatures:**

I hereby submit this course syllabus:

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Michael Medley, MBA, Instructor

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

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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:

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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:

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

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Michelle Olsen, MLS, Campus Librarian (Richfield Campus)