CIS 1140

Division: Career and Technical Education
Department: Information Technology
Course: CIS 1140
Title: Networking Technologies
Catalog Description:

In this course, students will learn the basic concepts and prerequisites of network computing, including hardware, software, topologies, and the Open Systems Interface (OSI) reference model.

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 1120 or department approval

Corequisites: N/A

Justification:

Networks and intra networks are becoming an integral part of our country's industrial infrastructure. No other sector contributes nearly as much to the growth of the economy. The demand for qualified Information Technology (IT) personnel to manage this technological infrastructure will continue to increase dramatically.

This course prepares students for job readiness at graduation and/or transfer to a four-year college.

Student Learning Outcomes:

Upon successful completion of this course, students will be able to:

- learn the basic concepts and prerequisites of network computing
- understand basic network concepts, including hardware, software, topologies, and the Open Systems Interface (OSI) reference model.

Content:

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

- distinguish between different network services

- describe basic transmission media
- explain the OSI model of network computing
- distinguish between the parts of a network
- identify the benefits of various protocols.

General Education Outcomes:

1) Read effectively, constructively, and critically.

Students will be required to read from reference manuals, and industry journals to retrieve, analyze, and s ynthesize information into design, repair, and troubleshooting situations.

4) Retrieve, evaluate, interpret, and deliver information through a variety of traditional and electronic media.

Students will research technical issues through the Internet, industry journals, and reference manuals.

5) Apply a cultural and historical awareness to a variety of phenomena.

Students will be aware of the changing nature of the computer field and how it impacts use of dated software with newer and older hardware. An awareness of the history and development of computers is a must for professional preparation.

Key Performance Indicators:

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

- exams
- quizzes
- success in subsequent courses
- scores on the CompTIA A+ Service Technician Certification Exam.

Representative Text and/or Supplies:

- Testout Labsim software: Network+
- Supplementary materials to support the hands-on lab activities

Optimum Class Size: 20
Maximum Class Size: 32

Signatures:

I hereby submit this course syllabus:

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Michael P. Medley, MBA, Assistant Professor

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