CIS 2155

Division: Career and Technical Education
Department: Computer Information Systems
Course: CIS 2155
Title: Cisco Internetworking Lab I
Catalog Description:
This lab is designed to compliment CIS 2152 Internetworking I and II and must be taken concurrently.
General Education Requirements: N/A
Semesters Offered: TBA
Credit/Time Requirement: Credit: 1; Lecture: 0; Lab: 2
Clock/Hour Requirements: 30
Offered for Non-Credit: No
Prerequisites: CIS 1140 or equivalent industry certification

Corequisites: CIS 2152

Justification:
This course will provide needed laboratory experience for students taking CIS 2152 Cisco Internetworking I and II, which is the first of two courses which will prepare a student to take the Cisco Certified Network Associate (CCNA) certification exam.

Student Learning Outcomes:
This course will provide students with controlled opportunities to develop skills associated with CIS 2152 Cisco Internetworking I and II.

Content:

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

- computing basics
- the OSI model
- local-area networks (LANs)
- electronics and signals
- media, connections, and collisions
- technologies
- structured cabling project
- routing and addressing
- protocols
- WANs and routers
- router command-line interface (CLI)

- router components
- router startup and setup
- router configuration
- Cisco Internetwork Operating System (IOS) images
- TCP/IP
- IP addressing
- routing protocols
- network troubleshooting.

General Education Outcomes:

1) Read effectively, constructively, and critically.
Students will be required to read from the assigned text, reference manuals, and industry journals to retrieve, analyze, and synthesize 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.

6) Apply computational skills to a variety of contexts.
Students will be required to utilize the binary, hexidecimal, and base-10 numbering systems in situations such as network addressing.

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%).

Following class:

- Post evaluation will be measured by success in subsequent classes and by succesful completion of the CCNA certification exam.

Representative Text and/or Supplies:

- *Cisco Networking Academy Program: Lab Companion Volume I,* current edition, or other equivalent text.

Optimum Class Size: 12
Maximum Class Size: 16

Signatures:

I hereby submit this course syllabus:

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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:

_____

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

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Michelle Olsen, MLS, Campus Librarian (Richfield Campus)