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IS 471.01: Fundamentals of Network Administration

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COURSE SYLLABUS
Fundamentals of Network Administration
IS 471-01 Fall 2006

Instructor:
    Ken Burrington, GBB 336, 243-6620 (office)
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Scheduled Time: Tues, Thurs 11:10am – 12:30pm

Outside Lab Hours : 1 to 2 hours per week depending on the modules

Office Hours: Tuesday & Thursday from 12:30 pm or by appointment

Meeting Place: GBB 206

Course Description:
    This current topics course will focus on the design, installation, configuration, and operation of local area networks. This course provides students with the knowledge and skills necessary to install and configure servers that are part of a workgroup or domain. We will also discuss alternate local area network methodologies including Microsoft Windows 2003, Novell NetWare, and UNIX. This course will utilize the networking lab in GBB 206. Every class will include a lecture or discussion on network topics along with a hands-on lab demonstrating the concepts.

Credits: This three credit course can be used to meet the IS option degree requirements.

Textbook:
    Required
    ? *70-290: Managing and Maintaining a Microsoft Windows Server 2003 Environment* by Craig Zacker, Microsoft Official Academic Course
    ? *Lab Manual 70-290: Managing and Maintaining a Microsoft Windows Server 2003 Environment* by Mark Fugatt, Microsoft Official Academic Course
    Optional
    ? *Mastering Windows 2003 Server* by Mark Minasi, Sybex, ISBN: 0-7821-4130-7 ($41.99 Amazon.com)

Course Objectives:
    ? To expose students to introductory networking concepts in the information technology industry.
    ? To expose students to the impact of network technology on a business operation.
    ? To give students hands-on experience installing, configuring and operating computer hardware and software in a network environment.
    ? To allow students to implement information systems theories and practices in a lab environment that simulates real business scenarios.

? To enable students to develop network plans and implement and manage those plans in a laboratory setting.

? To expose students to computer hardware concepts (hard drives, RAM, CD-ROM).

Course's Relationships to School of Business' Shared Values

? **Lifelong learning skills:** students learn that network and information technology are ever-changing and it is necessary to stay current.

? **Workplace knowledge and skills:** the course covers important networking and telecommunications concepts that link workstations in networks.

? **Integration of technology:** the entire course integrates networking hardware and software with information needs of organizations.

? **Business community connection:** guest speakers from the community and elsewhere on campus assist students' understanding of application of telecommunications technology.

Prerequisites:

This course requires students to have a basic knowledge of computers and networks that can come from courses offered in the Computer Science Department, Information Systems Department, or through work experience.

Grading:

? Student performance will be based on a combination of quizzes, assignments/class participation, attendance, and a final exam. These four areas will be weighted equally with regards to the final grade. The final exam will be open book and require students to demonstrate many of the skills learned through out the semester.

? Students wishing to take this class for graduate credit will be required to prepare a research paper on an advanced networking topic. The research paper should address the organizational issues for implementing and operating a network to meet the information technology needs of a business or organization. Students should research the issues associated with directory services, network infrastructure, and network security for the selected topic. The paper should be written in APA format and show that the student has synthesized the research material into a document that makes recommendations for successful implementation of a network system for a business or organization. Students are required to get the research topic approved by the instructor.

? Grades will be assigned based on the following breakdown: A – 90% and above, B – 89% to 80%, C – 79% to 70%, D – 69% to 60%, and F – below 59%.

Course Topics:

? Introduction to Server Hardware

? Introduction to Network Concepts including the OSI Model and TCP/IP

? Discuss alternative network options such as peer to peer and server-based networks

? Design and configure a domain environment.

? Connect clients to a network.

? Introduce the concepts involved with accessing and administrating data.

? Introduction to network security concepts

? Design and implement disaster protection