

State University of New York at Buffalo  
SCHOOL OF MANAGEMENT  
Spring 2007

MGS 651- Managing Computer Networks      Friday, 11:00-1:40 PM - Jacobs 110

Instructor      Prof. H. R. Rao  
325G Jacobs Management Center  
645-3425

Office Hours      Thursday, 11.00 am -12.00 noon

Lab Instructor: Prof Dave Murray / 325J Jacobs / E-Mail: [djmurray@acsu.buffalo.edu](mailto:djmurray@acsu.buffalo.edu)

Lab TA: Insu Park [insupark@buffalo.edu](mailto:insupark@buffalo.edu)

Prof Murray and Insu have allocated ten, one hour slots per week when they are available for questions regarding the lab. Please sign up on the door of Sleiman lab.

Textbooks:      Brian McCann, Dan NiNicolo,: MCSE GUIDE TO MANAGING A MICROSOFT WINDOWS SERVER 2003 ENVIRONMENT ENHANCED, Course Technology, April 11, 2005 (I am told that there are cheaper books in Geeks and Sneaks); ISBN# 0-619-21752-9

### Course Motivation

The Money Magazine states that the job with the second highest chances of growth is that of the systems analyst, and that in order to make a smart career jump, it is necessary to have expertise in PC Network administration.

Datamation. A global study conducted by UNC, Keenan Flagler Business School, shows that “shifting to PCS and LANS to integrate information is paramount for agile world-class competition.”

Alumni in the IS area have given me feedback on this and have emphasized the necessity for such a course.

### Course Objectives

This is an introductory and experimental course in Local Area Networks. Its primary objective is: To introduce students to fundamental concepts and terminologies in the field. This course will teach sufficient technical material so that students can deal intelligently with technical peers, consultants, and vendors in the area of Data Communication.

By the end of the course, students will be able to design and estimate costs of a Local Area Network, select suitable connection options for a network, make informed choices about network operating systems, and network interconnection alternatives. Students will have a much deeper appreciation of networks and network administration.

It is important to realize that this is partly a “hands-on” technology course. As an offering from a business school, the emphasis will be managerial, but there will also be a hardware lab on networking or booting up a network operating system. This course will provide you with foundation skills that you may use to subsequently develop a career in the field of networks.

Note: You will be using the Sleiman Lab I have set up. The lab instructor will be available at the following times: to be announced. You can sign up on 322 Jacobs at these time slots for the lab.

### Evaluation

Grading:      Grading is heavily weighted towards homework assignments and the end-of-the-term

project presentation/report and case submission.

Homework Assignments	30%
Case Submission	10%
Project Presentation	5%
Project Report (Ind (15%+team (15%))	30%
Final Exam	<u>25%</u>
(week of May 4)                      Total	100%

1. There will be one exam. The exam will be closed book, with NO notes.
2. The course involves weekly assignments. Assignments are due a week from the day they are assigned, by the end of class. Each day that any assignment/project/case is late equals a loss of 10%.
3. The course also involves one case that has to be submitted during the semester. The text of the case will be made available later.
4. Term Project Submission - Students are to work in group sizes of 2. You will be graded both on your individual part as well as the part you write as a team. Hence each should be clearly labeled.
  - (a) Students must submit a specific topic (latest by February 9), and a 1-page (per student) detailed agenda by the end of February.
  - (b) By the end of March, students must submit an executive summary, a list of ten references and a ten page paper (per student)
  - (c) The final deliverable, due at the end of April, will be (a) the combined 20 page paper (after duplications are deleted) and (b) a team deliverable of five – eight pages - this could be an application to a real –life scenario or mini-case study based on the research you have done in part (a)Remember that your document should be a hypertext white paper document, with detailed references.

Note::

The general topic that you will focus on is one of the critical areas in today's information technology network world that focuses on national needs, such as the following:

A. Cybersecurity and Critical Infrastructure Protection as applied to a **specific** industry (of your choice as a team), eg transportation industry, financial services industry, retail industry, mobile services, etc etc)

Eg :Network security, Intrusion detection, Denial of service attacks, Viruses, worms, and ways to combat them, etc, etc

Or

The use of IT to enhance security and reduce the vulnerabilities of our society to **catastrophic** events, whether natural or man-made.

B. Information Assurance (IA)

What are the major IA issues and trends in a **specific** e-transaction, e-commerce environment (e.g., e-finance, e-banking, etc.)? Where do these issues arise and how do we address the issues? What are the future trends w.r.t. the issues and IS solutions? What kinds of quantitative models can be applied or metrics developed to help an IT manager make decisions regarding IA

C. Human Resources

Development of human resources to support national or regional needs in Information assurance training, education and research, including improving participation of under-represented groups and minorities. (eg native Americans, Hispanic, African American and other minorities)

D. Decision Making

Evaluating the needs for the acquisition of broad information technologies infrastructure including networking and computing systems to support Information assurance programs in specific firms. Includes risk and uncertainty issues

Each team should choose from among the broad topics. No more than 1/3 of the class will be allowed to do a paper in a particular broad area. Hence the earlier you make a decision and get it Okd by me, the better it will be!