CSIT 3353 - SYSTEM ADMINISTRATION

CREDIT HOURS: 3
PREREQUISITES: CSIT 2301 or CSCI 3302; CSCI 2311
GRADE REMINDER: Must have a grade of C or better in each prerequisite course.

CATALOG DESCRIPTION

The configuration, installation and maintenance of a computer using a current operating system in a networked environment. Emphasis will be placed on resource management, performance and security. May not be used to satisfy computer science requirements for a major or minor in computer science or computer information systems.

PURPOSE OF COURSE

To acquaint the student with operating system and network administration through the assignment of a variety of problems requiring system design, development and implementation.

EDUCATIONAL OBJECTIVES

Upon successful completion of the course, students should be able to:

1. Demonstrate an understanding of operating systems concepts.
2. Maintain a networked computer system.
3. Describe the life-cycle of a computer.
4. Identify tools and techniques for system administration.
5. Configure, install, and maintain a networked computer system.
6. Identify relevant security issues.

COURSE CALENDAR

This course meets for a minimum of 37.5 lecture contact hours during the semester, including the final exam. Students have significant weekly extracurricular assignments which involve readings, operating system configuration, virtual machine creation, programming, or engaging in other forms of preparation. Students are expected to complete 4-5 major homework assignments related to the above topics, multiple in-class laboratory assignments, and 2-3 exams in addition to the final exam. Students are expected to prepare for any class assignments or quizzes over the material covered in class or the extracurricular assignments. Successful completion of these activities requires at a minimum six additional hours of outside of classroom work each week.

CONTENT **Hours**

Introduction and Concepts 5
- Process Management
- Memory Management
- Storage Management
- System Protection

Installation.....1
- Installation and Configuration
- Process and Documentation

User Management 3
- Create/Delete/Update
- Groups and Permissions
- Polices and Procedures

File Systems 6
- Format and Layout
- Organization and Operation
- Configuration

Peripherals 3
- Hardware Management
- Printer Installation, Configuration, Management
- Device Driver Installation, Configuration, Management

Networking 6
- Network Interface Configuration
- Setup and Masking
- Wireless

Applications 6
- Installation, Configuration, Management
- Office Suite
- ISV Software
- Utilities
- Policies and Procures

Performance 5
- Tuning - Files System, Tools (Defragment, Compress, etc.)
- Tasks - TSR issues
- Registry Management

Security 4
- Tools - Web Setup, Firewalls, Virus, Spyware, blockers
- Policies and Procedures - Access/Permissions/Accounts

Maintenance 3
- Backup/Restore
- RAID Organization and Operation
- Hardware/Software Updates

Exams (plus final) 3

TOTAL 45

REFERENCES

Frisch, A., Essential System Administration, O'Reilly & Associates, 3rd Ed., 2002.

Hassel, J., Learning Windows Server, O'Reilly & Associates, 2nd Ed., 2003.

Hein, T., Nemeth, E., and Snyder, G., Linux Administration Handbook, Prentice Hall, 2002.

Installing, Configuring, and Administering Microsoft 7 Windows 7 XP Professional (70-270), 2nd Ed.,

http://www.microsoft.com/MSPress/books/7721.asp

Microsoft® Windows® XP Inside Out, 2nd Ed., http://www.microsoft.com/MSPress/books/7109.asp

Microsoft® Windows® XP Networking Inside Out, http://www.microsoft.com/MSPress/books/5885.asp

Microsoft® Windows® XP Professional Administrator's Pocket Consultant, 2nd Ed., http://www.microsoft.com/MSPress/books/7777.asp

Microsoft® Windows® XP Networking and Security Inside Out: Also Covers Windows 2000 http://www.microsoft.com/MSPress/books/7110.asp

Nemeth, E. et al, UNIX System Administration Handbook, Prentice Hall, 3rd Ed., 2000.

Supporting Users and Troubleshooting a Microsoft® Windows® XP Operating System (70-271) http://www.microsoft.com/MSPress/books/7250.asp

Supporting Users and Troubleshooting Desktop Applications on a Microsoft® Windows® XP Operating System (70-272), http://www.microsoft.com/MSPress/books/7576.asp

Williams, R., and Walla, M., The Ultimate Windows Server 2003 System Administrator's Guide, Addison-Wesley, 2003.

This is what credit hours do, and this is how university students keep up with the trajectory of their degree while studying at a university. If you are a new international student, or simply new to the US university system, it can be a headache trying to understand what is going on in terms of how your coursework fall in line with your degree. You hear tons of people talking about taking a heavy 18 credit hour semester, and some talking about the breeze that the 6 credit hours will be. First of all, you might be thinking, what is a credit hour?Â Essentially, a credit hour is a unit of measurement that indicates how much work you are doing during a semester towards your Bachelor or Masters degree. Students are awarded credit for classes on the basis of the Carnegie unit. CSIT admission, entrance, routine, notices, notes, solution, books, help to all.Â CSC 253: Database Management System (DBMS). CSC 254: Computer Graphics (CG). CSC 255: Introduction to Cognitive Science (ICS).Â CSC 407: Network And System Administration. CSC 408: Software Project Management (SPM). Notes, Syllabus & more. Collection by: Tribhuvan University Institute of Science and Technology B.Sc. CSIT Seventh Semester Detailed-Syllabus Course Title: Network and Systems Administration Course no: 407 Full Marks : 60+20+20 Credit hours : 3 Pass Marks : 24+8+8 Nature of course : Theory (4 Hrs.) + Lab (3 Hrs.) Synopsis: Provides the concept of network and system administration Goal: The class concentrates on the network and system administration, and covers subjects ranging from initial installation of OS to day-to-day administrative tasks such as Network and Server Configurations, management of user accounts and