CSC 353 - SYSTEM ADMINISTRATION

CREDIT HOURS: 3
PREREQUISITES: CSC 201 or 241; CSC 211
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.

CONTENT

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


Installing, Configuring, and Administering Microsoft® Windows® XP Professional (70-270), 2nd Ed.,
http://www.microsoft.com/MSPress/books/7721.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

**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