CSC 353 - SYSTEM ADMINISTRATION

CREDIT HOURS: 3
PREREQUISITES: CSC 201 or 302; 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.

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.

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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 Procedures

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 7 Windows 7 XP Professional (70-270), 2nd Ed.,
http://www.microsoft.com/MSPress/books/7721.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

Credit Hours: 3
Semesters Offered: discontinued
Pre-requisites: CSC 145 or consent of instructor.
CIS 243 Business Statistics - I.