CSC 353 - SYSTEM ADMINISTRATION

CREDIT HOURS: 3
PREREQUISITES: CSC 201 or 202 or 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

<table>
<thead>
<tr>
<th></th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction and Concepts</td>
<td>5</td>
</tr>
<tr>
<td>Process Management</td>
<td></td>
</tr>
<tr>
<td>Memory Management</td>
<td></td>
</tr>
<tr>
<td>Storage Management</td>
<td></td>
</tr>
<tr>
<td>System Protection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Installation and Configuration</td>
<td></td>
</tr>
<tr>
<td>Process and Documentation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>User Management</td>
<td></td>
</tr>
<tr>
<td>Create/Delete/Update</td>
<td></td>
</tr>
<tr>
<td>Groups and Permissions</td>
<td></td>
</tr>
<tr>
<td>Polices and Procedures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
<tr>
<td>File Systems</td>
<td></td>
</tr>
<tr>
<td>Format and Layout</td>
<td></td>
</tr>
<tr>
<td>Organization and Operation</td>
<td></td>
</tr>
<tr>
<td>Configuration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Peripherals</td>
<td></td>
</tr>
</tbody>
</table>
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