

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

X Transfer Course X A.A. Degree applicable course
(check all that apply)

COURSE NUMBER AND TITLE: CSIS 176 Managing a Windows Network

UNIT VALUE: 2

MINIMUM NUMBER OF SEMESTER HOURS: 40

BASIC SKILLS REQUIREMENTS: Appropriate language and computational skills

ENTRANCE REQUIREMENTS

PREREQUISITE: CSIS 162 and CSIS 163

COREQUISITE: None

RECOMMENDED PREPARATION: None

SCOPE OF COURSE:

This course provides students with the knowledge and skills necessary to administer, support, and troubleshoot networks that incorporate Microsoft Windows.

SPECIFIC COURSE OBJECTIVES:

The successful student will be able to:

1. Creating, Configuring, Managing, Securing, and Troubleshooting File, Print, and Web Resources.
2. Configuring, Administering, and Troubleshooting the Network Infrastructure.
3. Managing, Securing, and Troubleshooting Servers and Client Computers.
4. Configuring, Managing, Securing, and Troubleshooting Active Directory Organizational Units and Group Policy.
5. Configuring, Securing, and Troubleshooting Remote Access.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

1. Creating, Configuring, Managing, Securing, and Troubleshooting File, Print, and Web Resources.
 - a. Publish resources in Active Directory. Types of resources include printers and shared folders.
 - b. Manage data storage. Considerations include file systems, permissions, and quotas.
 - c. Create shared resources and configure access rights. Shared resources include printers, shared folders, and Web folders.
 - d. Configure and troubleshoot Internet Information Services (IIS).
 - e. Monitor and manage network security. Actions include auditing and detecting security breaches.
2. Configuring, Administering, and Troubleshooting the Network Infrastructure
 - a. Troubleshoot routing. Diagnostic utilities include the tracert command, the ping command, and the ipconfig command.
 - b. Configure and troubleshoot TCP/IP on servers and client computers. Considerations include subnet masks, default gateways, network IDs, and broadcast addresses.
 - c. Configure, administer, and troubleshoot DHCP on servers and client computers.
 - d. Configure, administer, and troubleshoot DNS.
 - e. Troubleshoot name resolution on client computers. Considerations include WINS, DNS, NetBIOS, the Hosts file, and the Lmhosts file.
3. Managing, Securing, and Troubleshooting Servers and Client Computers.
 - a. Install and configure server and client computer hardware.
 - b. Troubleshoot starting servers and client computers. Tools and methodologies include Safe Mode, Recovery Console, and parallel installations.
 - c. Monitor and troubleshoot server health and performance. Tools include System Monitor, Event Viewer, and Task Manager.
 - d. Install and manage Windows 2000 updates. Updates include service packs, hot fixes, and security hot fixes.
4. Configuring, Managing, Securing, and Troubleshooting Active Directory Organizational Units and Group Policy
 - a. Create, manage, and troubleshoot User and Group objects in Active Directory.
 - b. Manage object and container permissions.
 - c. Diagnose Active Directory replication problems.
 - d. Deploy software by using Group Policy. Types of software include user applications, antivirus software, line-of-business applications, and software updates.
 - e. Troubleshoot end-user Group Policy.
 - f. Implement and manage security policies by using Group Policy.

5. Configuring, Securing, and Troubleshooting Remote Access.

- a. Configure and troubleshoot remote access and virtual private network (VPN) connections.
- b. Troubleshoot a remote access policy.
- c. Implement and troubleshoot Terminal Services for remote access.
- d. Configure and troubleshoot Network Address Translation (NAT) and Internet Connection Sharing.

REQUIRED READING: Microsoft, MCSE Training Kit, Managing a Windows Network, 2001

SUGGESTED READING:

REQUIRED WRITING:

Lab assignments that demonstrate managing and troubleshooting skills in a Windows network.

OUTSIDE ASSIGNMENTS:

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short-term classes.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

- lecture
- laboratory
- lecture-laboratory combination
- directed study

DISTANCE LEARNING:

This course may be offered as a distance learning course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.

Yes No

If yes, check all that apply:

- Television Course (Video one-way, e.g. ITV, video cassette, etc.)
- Online Course (Text one-way, e.g. newspaper, correspondence, electronic file, etc.)
- Two-Way Video Conferencing (Two-way interactive video and audio)
- One-Way Video Conferencing (One-way interactive video and two-way interactive audio)
- Computer Assisted Instruction (A specialized form of mediated instruction relying primarily on student access to information and prepared lessons or teaching materials through a computer terminal, but not under immediate supervision of a qualified instructor.)

GRADING POLICY AND STANDARDS

Grades for courses are based upon final examinations, mid-term examinations, other tests, assignments, projects, and participation. Faculty will inform students of their grading policy at the beginning of each semester.

50-80% Lab Assignments
50-20% Examination

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?

Yes ___ No X Number of times course may be taken for credit: _____

If yes, identify specific provision of Title 5 Division 2 section(s), 55761-55763 and 58161 which qualifies course as repeatable:

CONTACT PERSON: Terrie Canon, x2610

SIGNATURES ON FILE