

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

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

COURSE NUMBER AND TITLE: CSIS 164 Network Infrastructure Administration

UNIT VALUE: 4

MINIMUM NUMBER OF SEMESTER HOURS: 80

BASIC SKILLS REQUIREMENTS: Appropriate language and computational skills.

ENTRANCE REQUIREMENTS

PREREQUISITE: CSIS 163 Windows Server

COREQUISITE: none

RECOMMENDED PREPARATION: none

SCOPE OF COURSE: This course provides students with the knowledge and skills necessary to install, configure, manage and support a network infrastructure that uses the Microsoft Windows Server products.

SPECIFIC COURSE OBJECTIVES: The successful student will be able to:

1. Installing, Configuring, Managing, Monitoring, and Troubleshooting DNS in a Windows Network Infrastructure
2. Installing, Configuring, Managing, Monitoring, and Troubleshooting DHCP in a Windows Network Infrastructure
3. Configuring, Managing, Monitoring, and Troubleshooting Remote Access in a Windows Network Infrastructure
4. Installing, Configuring, Managing, Monitoring, and Troubleshooting Network Protocols in a Windows Network Infrastructure
5. Installing, Configuring, Managing, Monitoring, and Troubleshooting WINS in a Windows Network Infrastructure
6. Installing, Configuring, Managing, Monitoring, and Troubleshooting IP Routing in a Windows Network Infrastructure
7. Installing, Configuring, and Troubleshooting Network Address Translation (NAT)
8. Installing, Configuring, Managing, Monitoring, and Troubleshooting Certificate Services

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

1. Installing, Configuring, Managing, Monitoring, and Troubleshooting DNS in a Windows Network Infrastructure
 - A. Install, configure, and troubleshoot DNS.
 - B. Manage and monitor DNS.
2. Installing, Configuring, Managing, Monitoring, and Troubleshooting DHCP in a Windows Network Infrastructure
 - A. Install, configure, and troubleshoot DHCP.
 - B. Manage and monitor DHCP.
3. Configuring, Managing, Monitoring, and Troubleshooting Remote Access in a Windows Network Infrastructure
 - A. Configure and troubleshoot remote access.
 - B. Manage and monitor remote access.
 - C. Configure remote access security.
 - D. Configure authentication protocols.
 - E. Configure encryption protocols.
 - F. Create a remote access policy.
4. Installing, Configuring, Managing, Monitoring, and Troubleshooting Network Protocols in a Windows Network Infrastructure
 - A. Install, configure, and troubleshoot network protocols.
 - B. Configure TCP/IP packet filters.
 - C. Configure and troubleshoot network protocol security.
 - D. Manage and monitor network traffic.
 - E. Configure and troubleshoot IPSec.
 - F. Manage and monitor IPSec.
5. Installing, Configuring, Managing, Monitoring, and Troubleshooting WINS in a Windows Network Infrastructure
 - A. Install, configure, and troubleshoot WINS.
 - B. Configure WINS replication.
 - C. Configure NetBIOS name resolution.
 - D. Manage and monitor WINS.
6. Installing, Configuring, Managing, Monitoring, and Troubleshooting IP Routing in a Windows Network Infrastructure
 - A. Install, configure, and troubleshoot IP routing protocols.
 - B. Manage and monitor IP routing.

7. Installing, Configuring, and Troubleshooting Network Address Translation (NAT)
 - A. Install Internet Connection Sharing.
 - B. Install NAT.
 - C. Configure NAT properties.
 - D. Configure NAT interfaces.

8. Installing, Configuring, Managing, Monitoring, and Troubleshooting Certificate Services
 - A. Install and configure Certificate Authority (CA).
 - B. Issue and revoke certificates.
 - C. Remove the Encrypting File System (EFS) recovery keys.

REQUIRED READING: Microsoft Press, MCSE Training Kit: Network Infrastructure, 2000

SUGGESTED READING: None

REQUIRED WRITING:

Problem solving exercises and skills demonstrated in computer homework assignments. A minimum of one page per homework assignment is required.

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 (include methods of determining whether the stated objectives have been met by students):

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% Assignments
20-50% Examinations

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

Yes ___ No X___ Number of times course may be taken for credit: 1

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

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SIGNATURES ON FILE