

El Paso Community College

Syllabus

Part II

Official Course Description

SUBJECT AREA	<u>Information Technology Systems</u>
COURSE RUBRIC AND NUMBER	<u>ITNW 1353</u>
COURSE TITLE	<u>Supporting Network Server Infrastructure</u>
COURSE CREDIT HOURS	<u>3 3 : 1</u> Credits Lec Lab

I. Catalog Description

Installing, configuring, managing, and supporting a network infrastructure. **Prerequisite: ITNW 1308. (3:1). Lab fee.**

II. Course Objectives

Upon satisfactory completion of this course, the student will be able to:

- A. Install, configure and deploy Windows Server operating system software.
- B. Utilize Virtual Machine technologies.
- C. Identify Windows Server networking concepts and common networking services and utilities.
- D. Examine cybersecurity principles and their application in a server environment.
- E. Configure and troubleshoot TCP/IP communication components to include IPv4 and IPv6.
- F. Install, configure, and troubleshoot a DNS (Domain Name Services) server.
- G. Implement DHCP and identify methods for high availability.
- H. Install and provision an IPAM (IP Address Management) server to centrally manage DHCP and DNS servers and zones.
- I. Enable, configure, and troubleshoot routing remote access to provide access to mobile workforces and remote offices.
- J. Identify uses for VPN's and Direct Access Services.
- K. Utilize industry standard methods for authentication and authorization by implementing network policies with Network Policy Server (NPS) and RADIUS (Remote Authentication Dial-In User Service).
- L. Provide network access to file resources in a business environment and implement Distributed File System (DFS).
- M. Explore strategies for securing and providing high availability of documents and files.
- N. Determine scenarios and methods for implementing high performance and high availability networks.
- O. Identify non-technical skills related to the I.T. profession to include communication, ethics, time-management, etc.

III. THECB Learning Outcomes (WECM)

1. Install and configure DHCP, DNS, remote access, network security using public key infrastructure.
2. Integrate network services.

3. Deploy operating systems using remote installation services.

IV. Evaluation

A. Preassessment

None

B. Postassessment

1. There will be four (3) written examinations. The exams are worth 100 points each.
2. Homework assignments will be assigned at the instructor's discretion and will be averaged on a 100-point scale.
3. Lab assignments will be assigned at the instructor's discretion and will be averaged on a 100-point scale.

C. Remediation

The instructor may provide the students with means of improving a grade. The instructor will determine the timing, form, and method of remediation.

D. Final Grade

The final grade report will be based on the percentage of the total points earned.

Percentage	Letter Grade
90 - 100.0	A
80 - 89.99	B
70 - 79.99	C
60 - 69.99	D
0 - 59.99	F

V. Disability Statement (Americans with Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

VI. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.

VII. Title IX and Sex Discrimination

Title 9 (20 U.S.C. 1681 & 34 C.F.R. Part 106) states the following "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving Federal financial assistance." The Violence Against Women Act (VAWA) prohibits stalking, date violence, sexual violence, and domestic violence for all students, employees and visitors (male and female). If you

have any concerns related to discrimination, harassment, or assault (of any type) you can contact the Assistant to the Vice President for Student and Enrollment Services at 915-831-2655. Employees can call the Manager of Employee Relations at 915-831-6458. Reports of sexual assault/violence may also be reported to EPCC Police at 915-831-2200.