El Paso Community College Syllabus Part II Official Course Description

| SUBJECT AREA | Information Technology Systems |
|--------------------------|-------------------------------------|
| COURSE RUBRIC AND NUMBER | <u>ITNW 1354</u> |
| COURSE TITLE | Implementing and Supporting Servers |
| COURSE CREDIT HOURS | 3 3 : 1 Credits Lec Lab |

I. Catalog Description

Develops skills necessary to implement, administer, and troubleshoot information systems that incorporate servers in a networked computing environment. **Prerequisite: ITCC 1301. (3:1). Lab fee.**

II. Course Objectives

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

- A. Identify Windows Server editions, roles, and features.
- B. Plan, install, configure, and upgrade Windows Servers with different editions, roles, and features to include file services, firewalls, etc.
- C. Utilize PowerShell for basic scripting and configuration tasks.
- D. Utilize Remote Management features to communicate with and administer various servers.
- E. Explore Windows Server file systems basics and configure and manage disks and storage spaces.
- F. Manage hardware devices and configure the Windows Server Environment.
- G. Manage and monitor data resources by using NTFS (sharing, permissions, etc.).
- H. Provide network access to file resources.
- I. Configure printing and print services.
- J. Describe the roles of a directory service, domain controllers, replication, and fault tolerance.
- K. Plan, design, and install active directory and work with objects such as forests, trees, domains, etc.
- L. Examine and change default group policies to manage a business environment.
- M. Create and manage active directory organizational units and determine object permissions, effective access, and inheritance.
- N. Create and manage user accounts, templates, and properties and manage access to resources by using groups and computer accounts.
- O. Automate account management by using the command line interface and script files.
- P. Create and enable local and domain Group Policies to secure access, deploy settings and software, and audit objects in a domain environment.
- Q. Create, apply, and analyze security templates, settings, and reports.
- R. Describe basic Windows Server networking concepts and configure TCP/IP (Transmission Control Protocol/Internet Protocol) and other protocols.
- S. Install, configure, monitor, and troubleshoot a DNS (Domain Name Services) server.
- T. Install and configure DHCP (Dynamic Host Configuration Protocol).
- U. Investigate the process and policies to manage and monitor DHCP (Dynamic Host Configuration Protocol).

Revised by Discipline: Fall 2015 (next revision in 3 years)

- V. Create and manage virtualized machines, networks, and hard devices utilizing Windows Server technologies.
- W. Utilize software tools to troubleshoot Windows Server problems.

III. THECB Learning Outcomes (WECM)

- 1. Configure peripherals and devices.
- 2. Set up servers.
- 3. Configure directory replication.
- 4. Manage licensing.
- 5. Create and manage system policies and profiles.
- 6. Administer remote servers and disk resources.
- 7. Create and share resources.
- 8. Implement fault-tolerance.
- 9. Configure servers for interoperability.
- 10. Install and configure Remote Access Services (RAS).
- 11. Identify and monitor performance bottlenecks and resolve configuration problems.

IV. Evaluation

A. Preassessment

None

B. Postassessment

- 1. There will be four (4) written examinations. The exams are worth 100 points each. The final exam will be comprehensive.
- 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 | В |
| 70 - 79.99 | C |
| 60 - 69.99 | D |
| 0 - 59.99 | F |
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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.