Course Number and Title: CNE 216 Open Source Server Administration

Campus Location:
Georgetown, Dover, Wilmington

Effective Date:
2018-51

Prerequisite:
CNE 192

Co-Requisites:
None

Course Credits and Hours:
3.00 credits
2.00 lecture hours/week
2.00 lab hours/week

Course Description:
This course covers installing, configuring, and maintaining an open source operating system (OS). User and file administration and resource sharing are covered.

Required Text(s):
Obtain current textbook information by viewing the campus bookstore - https://www.dtcc.edu/bookstores online or visit a campus bookstore. Check your course schedule for the course number and section.

Additional Materials:
None

Schedule Type:
Classroom Course

Disclaimer:
None

Core Course Performance Objectives (CCPOs):

1. Deploy an open source server. (PGC 1, 4)
2. Create and maintain user accounts for an open source server. (CCC 1; PGC 1, 4)
3. Implement and manage file storage for an open source server. (CCC 1; PGC 1, 4)
4. Set up and manage file and print services for an open source server. (CCC 1; PGC 1, 4)
5. Configure and install common open source system services. (CCC 1, 5; PGC 1, 4)

See Core Curriculum Competencies and Program Graduate Competencies at the end of the syllabus. CCPOs are linked to every competency they develop.

Measurable Performance Objectives (MPOs):
Upon completion of this course, the student will:

1. Deploy an open source server.
    1. Compare and contrast a Windows server and an open source server.
    2. Install an open source operating system (OS).
    3. Configure and test an open source OS.
2. Create and maintain user accounts for an open source server.
    1. Explain the purpose and function of user account
    2. Develop a plan to create group accounts.
    3. Set up user authentication parameters.
    4. Construct and maintain group and user accounts.
3. Implement and manage file storage for an open source server.
    1. Describe the different types of file storage.
    2. Develop a file storage plan.
    3. Install and maintain a file storage system.
4. Set up and manage file and print services for an open source server.
    1. Explain the function of file and print services.
    2. Create a plan to manage file and print services.
    3. Implement file and print services based on specific group policies.
5. Configure and install common open source system services.
    1. Explain the concept of open source system services.
    2. Install and maintain open source system service software.

Evaluation Criteria/Policies:
Students must demonstrate proficiency on all CCPOs at a minimal 75 percent level to successfully complete the course. The grade will be determined using the Delaware Tech grading system:

92	–	100	=	A
83	–	91	=	B
75	–	82	=	C
0	–	74	=	F

Students should refer to the Student Handbook - https://www.dtcc.edu/handbook for information on the Academic Standing Policy, the Academic Integrity Policy, Student Rights and Responsibilities, and other policies relevant to their academic progress.

Core Curriculum Competencies (CCCs are the competencies every graduate will develop):

1. Apply clear and effective communication skills.
2. Use critical thinking to solve problems.
3. Collaborate to achieve a common goal.
4. Demonstrate professional and ethical conduct.
5. Use information literacy for effective vocational and/or academic research.
6. Apply quantitative reasoning and/or scientific inquiry to solve practical problems.

Program Graduate Competencies (PGCs are the competencies every graduate will develop specific to his or her major):

1. Apply techniques, skills and usage of the modern tools of a Computer Network Engineering Technician.
2. Apply analysis tools and problem-solving methods learned in the mathematics, computer, and electrical/electronic courses to troubleshoot network problems.
3. Diagnose and resolve network issues.
4. Install, configure, administer and troubleshoot network services for file access and storage, web-content hosting, network communications, network gateways and proxies, and security services on networking servers.
5. Design, install, configure and operate Wide Area Networks (WAN) and Local Area Networks (LAN).
6. Explain the functions and the workings of common communications protocols, and how such protocols are developed by standards organizations.

Disabilities Support Statement:
The College is committed to providing reasonable accommodations for students with disabilities. Students are encouraged to schedule an appointment with the campus Disabilities Support Counselor to request an accommodation needed due to a disability. A listing of campus Disabilities Support Counselors and contact information can be found at the disabilities services - https://www.dtcc.edu/disabilitysupport web page or visit the campus Advising Center.