## **Course Competency**

## COP2825 Implementing an Internet Server (4 credits)

## **Course Description**

Students will learn to implement, support, and maintain Internet servers. Both Microsoft and Apache servers are covered. Recommended preparation: Prior knowledge of operating systems and managing network resources is recommended. A .S. degree credit only. Laboratory fee.

Course Competency	Learning Outcomes
<b>Competency 1:</b> demonstrate an understanding of how to install an Internet server	<ol> <li>Communication</li> <li>Computer / Technology Usage</li> </ol>
<ol> <li>Listing the hardware and software requirements needed to install an Internet server.</li> <li>Planning an Internet Server installation.</li> <li>Installing the product and verifying it is installed.</li> <li>Explaining the various options presented during Setup.</li> <li>Ensuring support for Internet services : File Transfer Protocol (FTP), telnet, World Wide Web (WWW), and database connections.</li> <li>Describing the state of the server and changes that occur after the installation.</li> <li>Assigning administrative privileges.</li> </ol>	
<b>Competency 2:</b> demonstrate an understanding of the architecture associated with Internet servers	<ol> <li>Communication</li> <li>Computer / Technology Usage</li> </ol>
<ol> <li>Describing the architecture of Internet servers.</li> <li>Explaining how the various Internet services relate to the architecture of the Internet servers.</li> </ol>	

<b>Competency 3:</b> demonstrate an understanding of the File Transfer Protocol(FTP) service	1. Computer / Technology Usage
<ol> <li>Describing the architecture of FTP service.</li> <li>Indicating the FTP-specific settings in and how to analyze their performance.</li> </ol>	
<b>Competency 4:</b> demonstrate an understanding of the World Wide Web (WWW) service	<ol> <li>Computer / Technology Usage</li> <li>Information Literacy</li> </ol>
<ol> <li>Describing the architecture of the WWW service.</li> <li>Indicating the WWW-specific settings and how to analyze their performance.</li> <li>Using WWW to transfer data between Internet hosts.</li> </ol>	
<b>Competency 5:</b> demonstrate an understanding ofsecurity architecture	<ol> <li>Computer / Technology Usage</li> <li>Information Literacy</li> </ol>
<ol> <li>Describing the security architecture used by Internet server.</li> <li>Describing the available security options.</li> <li>Explaining how performance may be affected by various security options.</li> </ol>	
<b>Competency 6:</b> demonstrate an understanding of security features in Windows and Linux	<ol> <li>Computer / Technology Usage</li> <li>Information Literacy</li> </ol>
<ol> <li>Implementing security features of Windows and Linux.</li> <li>Indicating when the security features of Windows and Linux are appropriate.</li> </ol>	
<b>Competency 7:</b> demonstrate an understanding of security features available in Microsoft Information Server	<ol> <li>Computer / Technology Usage</li> <li>Information Literacy</li> </ol>

<ol> <li>Indicating when the security features of Internet Information Server are appropriate.</li> <li>Implementing security features such as Secure Socket Layer (SSL) and Transport Layer Security (TSL).</li> </ol>	
<b>Competency 8:</b> demonstrate an understanding of security features in Apache Internet Server	<ol> <li>Computer / Technology Usage</li> <li>Information Literacy</li> </ol>
<ol> <li>Indicating when the security features of Apache are appropriate.</li> <li>Implementing security features such as SSL and TLS.</li> </ol>	
<b>Competency 9:</b> demonstratean understanding of how to perform tuning and optimizing techniques	1. Computer / Technology Usage
<ol> <li>Describing the purpose of virtual directories.</li> <li>Describing the purpose of virtual servers.</li> <li>Creating and using virtual directories.</li> <li>Creating and using virtual servers.</li> </ol>	
<b>Competency 10:</b> demonstratean understanding of how to perform tuning and optimizing techniques	1. Computer / Technology Usage
<ol> <li>Monitoring and interpreting performance data about an Internet server site.</li> <li>Indicating what registry settings affect Windows Internet Information Server.</li> <li>Maintaining a log for tuning purposes.</li> </ol>	

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