EET 403  
Advanced Local Area Networking

**Instructor:** Professor Kilgore  
**Office:** 402 Whalin  
**E-mail:** jeff.kilgore@eku.edu

**Lecture/lab/demonstration:** TR 11:00 - 12:40 a.m.  
**Credit:** 3 credit hours.  
**Prerequisite:** EET 303

**Intended Audience.**  
This course is aimed at the person that works with computers and networks and wishes to gain information concerning networking with Windows 9x/ME/2000/XP clients, Windows XP, Windows 2003 server and basic Linux servers.

**Catalog Description.** Prerequisite EET 303. This course will cover installation, configuration, troubleshooting and maintaining server setup. The participants will be given the opportunity to setup and run server operating systems with Ethernet hardware.

**Course description.**  
The intent of this course is to provide the participant with current, basic information on local area network hardware, Windows 9x/ME/2000/XP clients, Windows 2003 server and basic Linux servers. In the course we will discuss installing, setting up, configuring and using; peer to peer hybrid networks, Windows 9x/ME/2000/XP clients, Windows 2003 server and basic Linux servers. The students will install, configure, troubleshoot and use Ethernet 10/100/1000 NICs, cables, hubs, switches and routers. The students will install, configure, troubleshoot and use Windows hybrid peer to peer, Windows 9x/ME/2000/XP clients, Windows 2003 server and basic Linux servers. Windows 2003 server will be configured as a file server, terminal server, DHCP server, proxy server, fire wall, remote access server, DNS, web server, E-mail server, small business server, E-commerce sever, ISA, IAS, and active directory services.

**Textbooks/Resources:**  
- Internet access. WWW... example.. www.microsoft.com ..., www.win2003mag.com .. etc.....  
- Windows XP software.  
- Linux RedHat server software.  

Access to 2 PC clone computers with at least a Pentium 1GHz class processor, 512M of memory, hard drive minimum size of 10G and Ethernet network cards.

**Handouts**

**Attendance.**  
You are expected to attend each lecture and lab. If you miss a test you should inform the instructor beforehand and provide a written, valid excuse. Each absence in excess of two will reduce your final grade by one letter.
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University Disability Statement: If you are registered with the Office of Services for Individuals with Disabilities, please make an appointment with the course instructor to discuss any academic accommodations you need. If you need academic accommodations and are not registered with the Office of Services for Individuals with Disabilities, please contact the office on the third floor of the Student Services Building, by e-mail at disabilities@eku.edu or by telephone at (859) 622-2933 V/TDD. Upon individual request, this syllabus can be made available in alternative forms.

Progress Report.
Each student must make an appointment with the instructor following each test. The student and the instructor will discuss the student's progress in the course and if needed ways to improve the student's performance.

Last Withdraw Date: March 10, 2006

Instructor Access.... very easy! Welcome to 2006 my e-mail address is jeff.kilgore@eku.edu I will check e-mail at least once a class weekday. I will attempt to answer your problems by e-mailing back an answer or if the question is of value to the class I will answer the question in class. Technology is great!

Grading.
You are expected to complete all reading and lab assignments. Your grade will be determined as follows:

1. Three tests each worth 100 points.
2. Four single page word processed, 12 point type, double spaced, 1” margins, reports on current topics each worth 5 points. NOTE: These reports must be developed utilizing a word processor, and be based on computer journals published in 2005/2006.
3. Labs will be worth 5 points each.
4. Quizzes--vary in point value and will be given as needed.

NOTE.
Quizzes cannot be made up.

Tentative Exam Schedule:

Test 1 02/09
Test 2 03/09
Final University Exam Schedule

Grading scale:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>94 - 100%</td>
<td>A</td>
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<tr>
<td>83 - 93%</td>
<td>B</td>
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<tr>
<td>70 - 82%</td>
<td>C</td>
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<td>60 - 70%</td>
<td>D</td>
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<tr>
<td>&lt; 60%</td>
<td>F</td>
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Objectives: Upon successful completion of this course the participant will be able to:
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a. Install, configure, troubleshoot and use basic Ethernet network hardware.

b. Identify the different network types, describe their basic operations, and explain their appropriateness for different office environments.

c. Install, configure, troubleshoot and run a Windows hybrid peer to peer / server network.

d. Install, configure, troubleshoot and run a simple Windows XP / quasi server network.

e. Install, configure, troubleshoot and run a simple Windows 2003 Server network.

f. Install, configure, troubleshoot and run 2003 as a DHCP server.

g. Install, configure, troubleshoot and run 2003 as a Proxy server.

h. Install, configure, troubleshoot and run 2003 as a network fire wall.

i. Install, configure, troubleshoot and run Windows 2003 remote access service.

j. Install, configure, troubleshoot and run Windows 2003 as an E-commerce server.

k. Install, configure, troubleshoot and run Windows 2003 as a web server.

l. Install, configure, troubleshoot and run Windows 2003 as an E-mail server.

m. Install, configure, troubleshoot and run Windows 2003 as a terminal sever.

n. Install, configure, troubleshoot and run a Virtual Private Network.

o. Install, configure, troubleshoot and use active directory services.

p. Install, configure, troubleshoot and use Windows 2003 small office network services.

q. Install, configure, troubleshoot and run RedHat Linux server in a network environment

r. Install, configure, troubleshoot and run DHCP services utilizing a Linux server.

s. Install, configure, troubleshoot and run Web services utilizing a Linux server.

t. Install, configure, troubleshoot and run FTP services utilizing a Linux server.

u. Install, configure, troubleshoot and run network load sharing services in a Linux environment.

Topical outline with anticipated weekly schedule.

Week 1 Review Ethernet hardware & Windows XP network configuration & troubleshooting.
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Week 2  Install, configure, troubleshoot and run a simple Windows 2003 server network.

Week 3  Install, configure, troubleshoot and run a Windows 2003 terminal server.

Week 4  Install, configure, troubleshoot and run a Windows 2003 DHCP server.
        Install, configure, troubleshoot and run a Windows 2003 as a DNS server.

Week 5  Install, configure, troubleshoot and run a proxy server in Windows 2003.
        Install, configure, troubleshoot and run an E-Commerce server in Windows 2003.

Week 6  Install, configure, troubleshoot and run a Windows 2003 web/ftp server.
        Install, configure, troubleshoot and run a Windows 2003 E-mail server.

Week 7  Install, configure, troubleshoot and run Windows 2003 with ISA.

Week 8  Install, configure, troubleshoot and run Remote Access Service

Week 9  Install, configure, troubleshoot and run Windows 2003 active directory service.

Week 10 Managing active directory services.

Week 11 Install, configure, troubleshoot and run Internet Authentication Service in AD.

Week 12 Managing Internet Authentication Service.

Week 13 Install, configure, troubleshoot and run a Virtual Private Network.

Week 14 Install, configure, troubleshoot and run a Red Hat Linux server.

Week 15 Install, configure, troubleshoot and run a Red Hat Linux FTP server.
        Install, configure, troubleshoot and run a Red Hat Linux Web server.