CIS 2665: Principles of Data Communication and LAN
Spring 2010

OBJECTIVES

Course Description: An introductory course in data communications and local area networking. Will provide the fundamental concepts and hands-on experience needed to set up and work with a local area. Wide area network will be addressed at a conceptual level. Hardware, software and network topology for both local and wide area networks will be covered.

Course Objectives: Upon successful completion of this course, students will be able to:

1. apply fundamental data communications concepts in solving a business problem (Prob 2, Exam 1 part 3, Exam 2 part 3, Exam 3 part 3)
2. install, configure and administer hardware and software to establish a LAN, specifically using Windows XP, Linux, PCs (Labs 1, 2, 4 & 5, Prob 1)
3. create wired (cat 5) and wireless connections (Cat 5, Lab 3)
4. express knowledge of data communication fundamentals and how those fundamentals relate to Linux & Microsoft-based networks (Exam 1 parts 1 & 2, Exam 2 parts 1 & 2, Exam 3 parts 1 & 2)

Learning Components: You will be required to show ability in three major learning components in this course:

Technology:
   Implementation and administration of Windows XP and Fedora
   Assembly of a PC and a Cat 5 patch cable
Business Knowledge
   Analyze a data communications problem in a business context
   Make a business case for a proposed IT solution
People Skills
   Work with diverse team members

RESOURCES

Instructor: Kerry Henson, PhD
Office: WDE 3108
Office hours: MW 9:00-9:50, 11:00-12:00
Phone: 660/422-2705
Email: dochenson@charter.net

Textbook: Business Data Networks and Telecommunications, 7th ed. by Raymond R. Panko, 978-0-13-600371-7 (required)
Linux+ Guide to Linux Certification, 2nd ed. by Eckert and Schitka, 0-619-21621-2 (optional)

Additional Purchases: Three scantrons. One floppy disk or USB memory stick, printing costs, as necessary. Cat5 pack (supplied)

Web page: cis.ucmo.edu/henson/2665/   Passkey:
http://wps.prenhall.com/bp_panko_bdnt_7/
EXPECTATIONS

Conduct: All class related activities will follow the Harmon College of Business Administration Code of Conduct: http://www.ucmo.edu/hcba/code

Prerequisites: BTE 1210. You should possess a knowledge of computing fundamentals.

Course Requirements:
1. You are responsible for reading each chapter and preparing assignments from the text. All assignments are due on the date specified by the instructor.

2. All writing assignments must be typed unless otherwise specified by the instructor. The computer labs are available for word processing and students are encouraged to use the microcomputers.

Attendance: This class is important. You are expected to attend class and participate in class discussions. Obtaining notes missed during a class absence is your responsibility.

Being late for class is not fashionable. It disrupts the class activities. Each individual is expected to make whatever arrangements are necessary to arrive in class on time.

If you decide to discontinue attending, then drop the course. If the course is not dropped, a course grade will be assigned based upon the number of points obtained.

Dishonesty: University policy deals severely with students caught cheating, copying papers, or participating in dishonest behavior. All ideas expressed in homework assignments should originate from you. All written work is to be unique to you. No reference material may be used during an examination unless provided by the instructor. All individual lab work is to be completed by you. All group lab work is to be completed by your entire group working together. Any work on your group assignments by someone outside your group is a violation of the policy.

The instructor may use electronic tools to check for plagiarism. Such tools may be web-based and require that the student’s submission be copied to a database maintained by a third party.

If a student is suspected of dishonesty, a meeting with the instructor will be scheduled. Responses to such an offense may include a zero on the assignment or test, a grade of "F" in the course, or recommendation for removal from the degree program. All instances of dishonesty will be reported to the Vice President for Student Affairs. For more information, see the University Calendar/Handbook.

Class Etiquette:
Use of electronic communication devices is not allowed. No phone calls. No texting. No laptops. Do not simply place devices in “silent” mode, but TURN OFF cell phones, Blackberries, etc. Anyone whose phone sounds in class will be required to stand and dance to the music. (I’m serious!) If you are tenting, you will be asked to leave the class.

Please remove visors and caps. I want to see your face.
ACTIVITIES AND ASSESSMENTS

Tests and Homework:  
<table>
<thead>
<tr>
<th>Activity</th>
<th>Points</th>
<th>Grading (total percentage):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (3)</td>
<td>375</td>
<td>90-100% = A</td>
</tr>
<tr>
<td>Projects, reports, quizzes</td>
<td>225</td>
<td>80-89% = B</td>
</tr>
<tr>
<td>Peer evaluation</td>
<td>50</td>
<td>70-79% = C</td>
</tr>
<tr>
<td>Total</td>
<td>650</td>
<td>60-69% = D</td>
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<tr>
<td></td>
<td></td>
<td>0 - 59% = F</td>
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</tbody>
</table>

Each exam will consist of objective (multiple choice) questions and may include short answer or essay questions as well. They will cover conceptual material from the texts and lectures as well as material from the labs covered since the previous exam. The last exam will be a limited comprehensive exam in that additional, identified topics may be included. Short reports will be required, either as an individual assignment or as a group assignment. Announced or unannounced quizzes may also be given. Such quizzes will cover material covered in the previous class or readings assigned for that class.

This course requires group-work be completed in the networking lab. You must arrange a time to meet with your group to complete these hands-on labs. Groups may also be required to complete short research reports and/or business cases. All group members are expected to participate in each hands-on lab and in any other group assignments. All group members will receive the group’s grade on all group work, but knowledge of the labs will be tested individually.

Variances in individual contributions to the group will be assessed with a Peer Review grade. When a group member is making no contribution to the group assignments, a meeting between the instructor and group members may be scheduled; however, it is the responsibility of the group to initiate this process. Lack of participation can impact an individual’s group grade, including a zero for that assessment.

Cases and reports are due at the stated time, usually the beginning or end of the period. Time slots for lab projects will be allocated and groups are expected to complete the project by the end of the assigned time. Note different groups may have different deadlines due to shared use of lab resources. Work not turned in at the assigned time will be counted late and will receive a 25% reduction, if turned in by the next class. Work not turned in by the class following will not be accepted.

Individual short quizzes and homework may be made-up in the case of an extreme emergency or a university excused absence. In either case, the instructor must be notified before class, an Exception Request Form must be completed, and support documentation must be provided. Make-up exams are not offered. If an exam is missed for a legitimate reason, the points will be added to the final exam. Group assignments may not be made up. Talk with your group to identify a workable lab time slot and be present.

On occasion an end-of-the-semester curve is applied to all grades. However, to be eligible the student must have completed all cases, quizzes, exams and assignments as well as not have had an excessive number of absences.
# Schedule of Topics

*(VERY MUCH SUBJECT TO CHANGE)*

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 11 -</td>
<td>Overview of the course. Introduction to networking.</td>
<td>Read Panko chp 1 - 4, Eckert chp 2; Lab: (1) XP Load, (2) Tear down, Cat 5; other assignments</td>
</tr>
<tr>
<td>Feb 15</td>
<td>Installing Windows XP. Data communications models (OSI, IP stack).</td>
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<td></td>
<td>Physical layer. Server hardware.</td>
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<tr>
<td></td>
<td>Local Area Networks (Ethernet). Extended topics.</td>
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<tr>
<td>Feb 17</td>
<td></td>
<td><strong>EXAMINATION ONE</strong></td>
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<tr>
<td>Feb 19 -</td>
<td>Wireless Local Area Networks. Wide Area Networking. Network applications.</td>
<td>Read Panko chp 5, 7 &amp; 11, Eckert chp 1, 3, parts of 4 - 7, 9, 12 &amp; 15; Labs: (3) Wireless, (4) Linux</td>
</tr>
<tr>
<td>Mar 29</td>
<td>Linux: introduction, installation, interaction, administration. Extended topics.</td>
<td>install; assignments</td>
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<tr>
<td>Mar 31</td>
<td></td>
<td><strong>EXAMINATION TWO</strong></td>
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<tr>
<td>Apr 2 -</td>
<td>Linux administration. TCP/IP. Network security.</td>
<td>Read Panko chapters 8, 9, 6 &amp; 10; Lab: (5) Linux/XP networking; assignments</td>
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<td>Apr 30</td>
<td>Telephony. Management. Extended topics.</td>
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<tr>
<td>Wed, May 5</td>
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<td><strong>EXAMINATION THREE (FINAL)</strong></td>
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<td>@ 8am</td>
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****** Last day to drop a class with a W is March 30 ******

Extended topics: As time allows additional material from the textbooks or other sources will be covered. Exams will address these extended topics as covered in class.
EXCEPTION REQUEST FORM

Course: _____________________ Date: _________

Name: _______________________________

I request (please check): _____ To make up an absence (official excused)

_____ To turn in a late assignment as on-time

Identify Assignment: ______________________________ __________________________

Justification:

___________________________________________________ ______________

___________________________________________________ ______________

___________________________________________________ ______________

___________________________________________________ ______________

Attached documentation includes:

___________________________________________________ ______________

___________________________________________________ ______________

(INSTRUCTOR USE ONLY)

Requirements:

___________________________________________________ ______________

___________________________________________________ ______________

___________________________________________________ ______________

Due date: ____________
STATEMENT OF UNDERSTANDING

In signing this statement I am stating that I understand all points presented in the syllabus and that I have completed all the prerequisites for this course.

Signature:_________________________________________ _________________
Date:     _____________________

POSTING OF GRADES

A student's course grade falls under federal privacy laws. If grades for all students are posted together, you may choose to have your grades posted. If posted, grades in this course will be posted by a special number assigned to you. Your social security number will not be used. Please indicate your preference below.

I prefer my grades be posted _____
not be posted ______

Signature:_________________________________________ _________________
Date:     ___________________