CMIS 330 – Data Communication Systems
Professor’s notes*
As of July 9, 2007

*Note: All content is based on the professor’s opinion and may vary from professor to professor & student to student. All content may be changed without notice. This information is for the purpose to provide analysis but is not binding in any form.

From a Scale 1-10 (1 = low demands; 5 = moderate demands; 10 = very demanding), How would you rate the overall level of difficulty of this course?

Level of demand = 6 (if you like to read a lot of technical information, digest it, and post it succinctly online) …”8” if reading technical information and then understanding how to apply doesn’t come quickly to the student.

From a Scale 1-10 (1 = low demands; 5 = moderate demands; 10 = very demanding), How would you rate the level of the reading requirements in this course?

Level of demand = 7+
This course requires a lot of reading each week, and it’s very technical in nature. There are several questions within each discussion board module for each unit that need to be addressed.

From a Scale 1-10 (1 = low demands; 5 = moderate demands; 10 = very demanding), How would you rate the level of the lecture requirements in this course?

Level of demand = 6
Most of the material is in the text. Lecture notes are supplementary.

From a Scale 1-10 (1 = low demands; 5 = moderate demands; 10 = very demanding), How would you rate the level of the online exam requirements in this course?

Level of demand = 7
The online exams are multiple choice but the questions are significant in terms of difficulty.

From a Scale 1-10 (1 = low demands; 5 = moderate demands; 10 = very demanding), How would you rate the level of the discussion board requirements in this course?

Level of demand = 8
Three to five discussion board questions that all need original answers and responses for each unit.

From a Scale 1-10 (1 = low demands; 5 = moderate demands; 10 = very demanding), How would you rate the level of the written paper requirements in this course?
Level of demand = 5
There is group work that requires coordination, but no final written paper that takes a tremendous amount of time.

Additional comments:

The course is extremely well organized and broken into methodical digestible modules for the learners, but it is very heavy in reading and understanding technical jargon.

The group work requires coordination and flexible schedules.

Learners coming in with the most technical experience will have the easiest time digesting the information. There is homework, current event articles, and quizzes due at regular intervals.
## Course Chart

**Textbook:** *Computer Networking: A Top-Down Approach Featuring the Internet*

<table>
<thead>
<tr>
<th>MODULE/WEEK</th>
<th>TEXTBOOK READING</th>
<th>LEARNING ACTIVITIES</th>
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<tbody>
<tr>
<td><strong>1</strong></td>
<td>Ch. 1 (pp. 1–67)</td>
<td><strong>Homework Assignments:</strong>&lt;br&gt;Part I – Questions 1, 6, 11, 16, &amp; 21 (pp. 67–68);&lt;br&gt;Part II – Find Network Administrator&lt;br&gt;&lt;br&gt;<strong>Discussion Board</strong>&lt;br&gt;&lt;br&gt;<strong>Group Effort Problem Solving:</strong>&lt;br&gt;1, 5, 8, 11, 15, 18, 21</td>
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<td><strong>2</strong></td>
<td>Ch. 2 (pp. 77–103, 133–150)</td>
<td><strong>Homework Assignments:</strong>&lt;br&gt;Part I – Programming #9 (pg. 176);&lt;br&gt;Part II – Write Down Technologies&lt;br&gt;&lt;br&gt;<strong>Group Effort Problem Solving:</strong>&lt;br&gt;1, 6, 11, 14 (pp. 175–178)</td>
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<td><strong>3</strong></td>
<td>Ch. 3 (pp. 184–214, 228–239, 253–267)</td>
<td><strong>Homework Assignments:</strong>&lt;br&gt;Part I – 2 questions at end of Chapter 3;&lt;br&gt;Part II – Pros and Cons&lt;br&gt;&lt;br&gt;<strong>Group Effort Problem Solving:</strong>&lt;br&gt;3, 6, 10, 13, 16, 20, 26, 29, 34 (pp. 283–289)</td>
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<td><strong>Discussion Board</strong>&lt;br&gt;&lt;br&gt;<strong>QUIZ</strong></td>
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<td><strong>4</strong></td>
<td>Ch. 4 (pp. 293–308, 321–336, 346-350, 368–372)</td>
<td><strong>Homework Assignment:</strong>&lt;br&gt;2 questions at end of Chapter 4&lt;br&gt;&lt;br&gt;<strong>Group Effort Problem Solving:</strong>&lt;br&gt;1, 5, 9, 13, 17</td>
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<tr>
<td></td>
<td></td>
<td><strong>Discussion Board</strong></td>
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<tr>
<td><strong>5</strong></td>
<td>Ch. 5 (pp. 419–496) Ch. 7 (pp. 605–660)</td>
<td><strong>Homework Assignment:</strong>&lt;br&gt;Vocabulary Words/Acronyms&lt;br&gt;&lt;br&gt;<strong>Group Effort Problem Solving:</strong>&lt;br&gt;1, 2, 10, 12, 16–17 (Ch. 5, pp. 513–516);&lt;br&gt;1, 3, 5, 9, 12 (Ch. 7)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Discussion Board</strong></td>
</tr>
<tr>
<td>Module/Week</td>
<td>Textbook Reading</td>
<td>Learning Activities</td>
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| 6           | Ch. 8 (pp. 672–693) | Homework Assignment:  
Part I – Identify Struggling Areas;  
Part II – 2 questions at end of Chapter 8;  
Part III – Review for Final Exam  
Discussion Board  
Quiz |
| 7           | Ch. 6            | Homework Assignment:  
2 questions at end of Chapter 6  
Discussion Board |
| 8           | Choose a chapter in the text not covered in class that is of interest to you. | Discussion Board  
*Last chance to submit Current Events*  
**Final Exam** |
Syllabus

LIBERTY UNIVERSITY DISTANCE LEARNING PROGRAM
CENTER FOR COMPUTER AND INFORMATION TECHNOLOGY

CMIS 330
BUSINESS DATA COMMUNICATION SYSTEMS

REQUIRED TEXTBOOK

SUGGESTED ADDITIONAL MATERIALS

OR

ESSENTIAL EQUIPMENT AND FACILITIES
Access to the Liberty web site and Blackboard online is critically important to the successful completion of this course. Any student having difficulty with Username, PIN and connectivity to this educational website by the first class session must inform the instructor immediately by email or phone. Additionally, if you wish to chat with the instructor by instant messenger, you should download an instant messenger compatible with MSN Chat. Office hours are held online via email and via phone.

COURSE DESCRIPTION
A study of the architecture, concepts, terminology, design, and management issues related to the modern environment of networking and data communications. Various types of networks and communication systems, protocols, regulatory issues and policies will be explored.

I. RATIONALE
Data Communications and Networking Systems are the backbone of today's business, online educational and many personal infrastructures. Data Communications and computer networks provide the basic framework by which
every other application, software package or interface is delivered, making it the layer that needs incredible reliability and versatility.

Computer Networks have become increasingly difficult and technically challenging for network engineers. Understanding computer networks is the utmost challenge for engineers and managers alike, who often have to determine where computer resources (financial and human) should be allocated. In addition, new and competing models for technology require greater knowledge and often transformation of entire network systems.

II. PREREQUISITES

CMIS 210 and 211

III. LEARNING OUTCOMES

By the end of this course, the student will be able to:

1. Describe the structure of a modern computer network (such as the Internet) in a layered architecture as referenced in the ISO open system model.
2. Able to carry out requirements analyses for network application systems such as Client-server distributed systems.
3. Able to specify application-programming interfaces in a TCP/IP network.
4. Able to describe the principles of communications protocols.
5. Able to analyze the performance of various protocols to identify the strengths and weaknesses.
6. Able to continue any industrial professional certification program.
7. Compare and contrast methodologies and topologies used in network communications.
8. Understand many of the concepts used in business communications as they apply to real-world scenarios.

IV. MATERIALS FOR LEARNING

A. Internet access and Microsoft Word
B. Required textbooks
C. Suggested additional materials

V. COURSE REQUIREMENTS AND ASSIGNMENTS

A. Textbook readings
B. Weekly homework  
C. Quizzes, Test  
D. Current event articles  
E. Group Project  
F. Discussion Board participation  

VI. EVALUATION AND GRADING  
A. Points  
A student’s grade will be determined objectively by her/his course achievements demonstrated in her/his homework, quizzes, final examination, and project results. Each piece of achievement will be scored in points that will be accumulated to give a total for each individual student at the end of a term. The total points will determine a student’s grade.

<table>
<thead>
<tr>
<th>Weekly Homework</th>
<th>6 Points/wk. x 6 weeks</th>
<th>36 Points</th>
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<tbody>
<tr>
<td>Quizzes (3rd &amp; 6th week)</td>
<td>25 Points/quiz</td>
<td>50 Points</td>
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<tr>
<td>Final Exam</td>
<td>50 Points</td>
<td>50 Points</td>
</tr>
<tr>
<td>Current Events – 3</td>
<td>3 Points each</td>
<td>9 Points</td>
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<tr>
<td>Group Project/Design – 5</td>
<td>4 Points each</td>
<td>20 Points</td>
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<tr>
<td>Class Participation – Discussion Board</td>
<td>5 Points/class x 7 classes</td>
<td>35 Points</td>
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<tr>
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<td>(no discussion grade for participation in week 8 while you are working on projects)</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>200 Points</strong></td>
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</table>

B. Scale  
A = 180–200  B = 160–179  C = 140–159  D = 120–139  F = 0–119  

C. The specific criteria for exercises will be discussed when they are assigned. Your grade in this class will be based on your works; however, I reserve the right to show grace in extenuating circumstances and apply a curve.

D. See the Policies page in Blackboard for additional information on the late policy, statute of limitations, backups, and academic and computing ethics. Generally speaking, no assignments are accepted late; grades must be challenged within 1 week. You are responsible for backing up your programs, and cheating will not be tolerated. Plagiarism is absolutely unacceptable and will be reported to the university if it occurs.