Data Communication

September 2003

Textbook： *Data and Computer Communications*, 6th Ed., by William Stallings, Prentice Hall

Website: http://williamstallings.com/DCC6e.html

講義教材 www.geocities.com/rayguang

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上 課 時 間

1st wk	09/17,18	Opening
2nd wk	09/24,25	
3rd wk	10/01,02	
4th wk	10/08,09	
5th wk	10/15,16	
6th wk	10/22,23	
7th wk	10/29,30	
8th wk	11/05,06	
9th wk	11/12,13	（Midterm Exam）
10th wk	11/19,20	
11th wk	11/26,27	
12th wk	12/03,04	
13th wk	12/10,11	
14th wk	12/17,18	
15th wk	12/24,25	
16th wk	12/31	
17th wk	01/07,08	（Final exam）
18th wk	01/15	（Report due）

評分方式：Midterm 40%, Final 40%, Report/Homework 20%

Exam.: 簡答為主，計算為輔

Homework: 上課繳交，逾時不收

Contents

✳ Optional

Topics for Course Report

（兩人一組）

1. Tools Page Laboratory Manual and Exercises

www.csee.usf.edu/~cristen/tools/toolpage.html

(1) Studying DLC flow and error control performance

(2) Studying the effects of frame length in Ethernet

(3) Studying the effects of early token release (ETR) in Token Ring

(4) Studying Markov chains and their solution as a set of equations

(5) Studying the effects of second moment on queueing delay

(6) Reproducing the Bellcore “self similar” traffic study

(7) Studying the effects of traffic shifts on LRD statistics

(8) Studying the effects of “self similarity” on queueing behavior

(9) Analysis of collected round-trip delay “ping” data

(10) Studying sliding window in a UDP/IP client/server application

REPORT GUIDELINES

Each term project will result in a detailed 10-20 page written technical report.

(1) Abstract.

- ✓ It comes first in your report, but you write it last.

(2) Summary.

- ✓ Gives succinct information on the purpose, methods, results and conclusions reported.

(3) Introduction.

- ✓ Include background material and discuss the scope and limitations of your project.

(4) Discussion.

- ✓ The body of your report. This includes the methodology used. Be sure to fully describe any figures, tables or diagrams you include.

(5) Results.

(6) Conclusions.

(7) References (must always be included), annotated if possible.

(8) Appendices, including supporting material as needed.

問卷調查

1. 請簡述你的修課動機
2. 請列出你所修過通訊相關的課程名稱及修課年級
3. 你修過以下課題嗎？
   - Fourier Transform
   - 線性代數
   - 機率統計
   - 通訊系統
4. 你如果決定選修這門課，希望透過此課程學到什麼?