

Communication Networks and Security

CISY 4436

Zahoor Khan, PhD

Last updated: January 2014

CISY 4436 (2G)

Course name: Communication Networks and Security

Time: TR- 1pm -215pm

Instructor: Dr. Zahoor Khan

Phone: 494-1876 (Dal office)

Web site: www.cs.dal.ca/~zkhan/4436

Email: zahoor.khan@smu.ca or @dal.ca

Office Hours: Send email

Goals of the course:

- Basic concepts of network standards, security, and design
- Demonstrate the common data communication architectures

Required/recommended Textbook/material:

1. Business Data networks and Telecommunications (9e) by R. Panko, Prentice Hall
2. Additional handouts may be provided by the instructor

Grading Scheme

| <u>Exam/Projects/Exercises</u> | <u>Weight</u> |
|--------------------------------|---------------|
| Assignments | 15 % |
| Project | 35 % |
| Midterm | 30 % |
| Class participation | 10 % |
| In-class test | 10 % |
| <hr/> | |
| Total: | 100 % |

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Assignments

- Three assignments
- First
 - Distributed: Thursday Jan 23
 - Due: Thursday Jan 30 (Before Lecture)
- Second
 - Distributed: Thursday Jan 30
 - Due: Thursday Feb 06 (Before Lecture)
- Third
 - Distributed: Thursday Feb 06
 - Due: Thursday Feb 13 (Before Lecture)

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Projects

- Possible areas
 - Cloud computing
 - Wired networks
 - Wireless networks
 - Internetworking
 - Wide area network
 - Network security
 - Sensor Networks

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Projects

- Abstract
 - Title and brief description
 - Due on Feb 6
 - Finalize on Feb 13
- Project presentations
 - Week 13 (March 25, 27)
- Project slides due on March 27
- Project report due on April 4

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Announcements and Email

- Email address and name
 - As already used for course registration
- Student's responsibility
 - Must check the course announcement webpage
 - Make sure email address is working
- Very important message can also be sent
 - Via your email address used in smu system
 - For course registration (Blackboard)
- Exercises, projects and course material
 - Will be distributed in class or on webpage

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Students with Special Needs

- Please contact
 - The Atlantic Centre:
 - <http://www.smu.ca/administration/atlcentre/>

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Course Outline

- Chapter 1:** Welcome to the cloud
- Chapter 2:** Network standard
- Chapter 3:** Network security
- Chapter 4:** Network management
- Chapter 5:** Wired Ethernet LANs
- Chapter 6:** Wireless LANs I
- Chapter 7:** Wireless LANs II
- Chapter 8:** TCP/IP Internetworking I
- Chapter 9:** TCP/IP Internetworking II
- Chapter 10:** Wide Area Networks
- Chapter 11:** Networked Applications

Slide 9

Weekly Schedule

| <u>Week No.</u> | <u>Topics</u> |
|-----------------|-----------------------|
| 1 | Chapter 1 |
| 2 | Chapters 2 |
| 3 | Chapter 2 |
| 4 | Chapter 5 |
| 5 | Chapter 6 |
| 6 | Chapter 7 |
| 7 | Winter Break |
| 8 | Chapter 8 |
| 9 | Chapter 9 |
| 10 | Chapter 11 |
| 11 | Chapter 10 |
| 12 | Chapters 3 |
| 13 | Project Presentations |

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End of Course Introduction