

Lecture 26 Overview

- Last Lecture
 - Advanced network topics
- This Lecture
 - What next?
 - Revision and exam information

Outline of 244 Lectures

Introduction

Signals and Encoding

Data transmission

Data compression

Data integrity (2)

Data security (2)

Introduction to networks

Media access control

Flow control and
error control

Local area networking (2)

Wide area networking (2)

Internet Protocol (IP) (2)

Transport Control

Protocol (TCP) (2)

Internet applications (2)

ADSL & ATM

Wireless Technologies(2)

Advanced Network Technologies

Ethics

COSC301: Network Management

- Topics
 - Operating systems
 - Network hardware
 - Network interface management
 - Scripting
 - Wireless networking
 - File systems
 - System installation and management (2)
 - Scheduled tasks and log management
 - Domain Name System
 - DHCP & address assignment
 - World Wide Web infrastructure

COSC301 (cont.)

- Topics (cont.)
 - Transaction Layer Security (TLS)
 - Electronic mail
 - Remote terminal services (SSH)
 - File transfer & Web caching
 - Directory services (LDAP)
 - Network administration
 - Internal routing
 - Firewalls
 - Network management tools
 - Network measurement & accounting
 - Diagnostics
 - Real life security experiences

COSC402: Internetworking

- Topics
 - Deep insights of TCP
 - Sockets introduction
 - Develop network apps using Socket APIs
 - IPv6
 - Wireless sensor networks & Internet of Things
 - Data center networks
 - 4G/5G networks
 - Mobile Opportunistic networks
 - Vehicular Ad-hoc Networks
 - Li-Fi networks & Network on chips
 - Software defined networks

Exam Scope

- Will emphasize the topics not yet assessed
 - No direct questions on lectures 1-6
 - No ethics questions
- What's left?
 - Everything else

Format

- Closed book
 - No notes or other materials
- Answer all questions.
 - No optional questions
- Write answers directly on the exam script.
- If you need more space or need to rewrite something, use the answer booklet.
 - Tell me about it, e.g. (answer continues in booklet)
- Answer booklet
 - Use for rough work only.

A Sample Exam Question

3. Explain the role of the ACK timer in a sliding window flow control protocol.



answer continues in booklet

(4)

How to Answer Exam Questions

- Check the global format of the exam to make sure you know how many questions need to be answered.
- Read the questions carefully.
- Pay attention to the number of marks possible for questions.
- If you have time, read over your answers.
- Do any easy questions first.
- Leave the right hand margin clear.

How to Answer Exam Questions

- Write legibly
 - If I cannot read it, I cannot give marks
- Use complete sentences, complete words, and proper punctuation.
 - Don't txt message answers
 - before is spelled 'before', not 'b4'
- Completely answer the questions.
 - If a question is worth several marks, don't just write a single sentence with the answer stated badly.

How to Answer Exam Questions

- Give appropriate background.
- Define any technical terms you use.
- Give an example if it will help demonstrate you understand something.

An Example of Answer

- Distinguish between FTP and TFTP. (3 marks)
- **Poor Answer:** FTP is the file transfer protocol, and TFTP is the trivial file transfer protocol.
- **Good Answer:** FTP is an application layer protocol allowing file transfers and provides a wide range of options such as multiple file types, compression, and multiple TCP connections. TFTP is a file transfer protocol without a lot of bells and whistles of FTP. FTP uses TCP, a reliable transport service, whereas TFTP uses UDP, an unreliable one.

How to Study for the Exam

- Read and understand the material given in the course handouts.
- Do all the tutorial exercises.
 - They are an excellent source of exam questions.
- THEN practise by doing some past exams which you can get from the library.
- Past years exams are a SUBSET of possible questions.
 - They are not THE set of possible questions.

Exam Timing

Exam is 3 hours long	= 180 minutes
Allow time to check	-30
	150

Total marks = 100

1 mark takes 1.5 minutes as a guide.

Use the marks for each question as a guide to how much detail is required.

Do not rely on the total space provided as a guide. Fitting the questions to the paper means this is unreliable. Use the marks !

A Perfect Film for Introducing Internet

Warriors of the Net

<http://www.warriorsofthe.net/>

Finally

*I wish you every success and hope we'll
meet up again some time*