COMP211: Computer Networks

Joachim Spoerhase

Ashton Building Room 3-11

joachim.spoerhase@liverpool.ac.uk

Meeting Times

Lecture Times and Locations:

- Tuesday, 16-17, 502 Building, Lecture Theatre 3
- Thursday, 11-13, Central Teaching Hub, Lecture Theatre B

Lab Times

- Labs run only in weeks 2-6.
- You are assigned to one of the following sessions (check your timetable):
 - Monday 13-14, George Holt, Teaching Laboratory 2, H1.16/1.17
 - Monday 16-17, George Holt, Teaching Laboratory 2, H1.16/1.17
 - Wednesday 12-13, George Holt, Teaching Laboratory 2, H1.16/1.17

Drop-In Session (optional)

Thursday 15-17, George Holt, Teaching Laboratory 3, H1.05

Course Aims

To introduce networked computer systems in general and the Internet in particular:

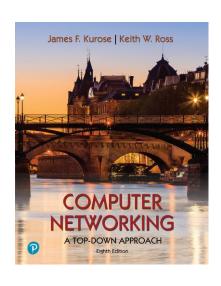
- The basic operating principles
- The design and organization principles of successful computer networks
- The key protocols and technologies used in the Internet.

Learning Outcomes

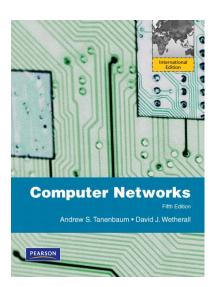
Upon completion, you should:

- be able to describe and justify the OSI Reference Model and the key protocols that govern the Internet.
- be able to program applications and protocols for computer networks.
- be able to illustrate and debate the use and need of cryptographic techniques in network security.

Text Books



 J. F. Kurose & K. W. Ross: Computer Networking: A Top-Down Approach. (Addison Wesley)



 A. S. Tanenbaum & D.J. Wetherall: Computer Networks. (Pearson)

Assessment

- Coursework: 20%
 - 2 JAVA programming assignments, 10% each
 - A1 Deadline: 17 October, 17:00
 - A2 Deadline: 31 October, 17:00

We check for plagiarism and collusion.

- Exam: 80%
 - On campus MCQ exam
 - consisting of 50 MCQ questions
 - 2 hours

Main Themes

- No one designed the Internet, no one owns it, and no one can see across it all
 - It just grew and grew and grew . . .
 - We try to make sense of it by imposing a structure (a series of layers) on it.
- The Internet is flawed and unreliable
 - So we have to be clever in how we use it.
- Designing applications for the Internet means making choices
 - And choices have consequences.