THE UNIVERSITY OF MELBOURNE

COMP90007 Internet Technologies

Ling Luo

Semester 2, 2020

Lecturers

Dr. Ling Luo

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Dr. Muhammad Usman

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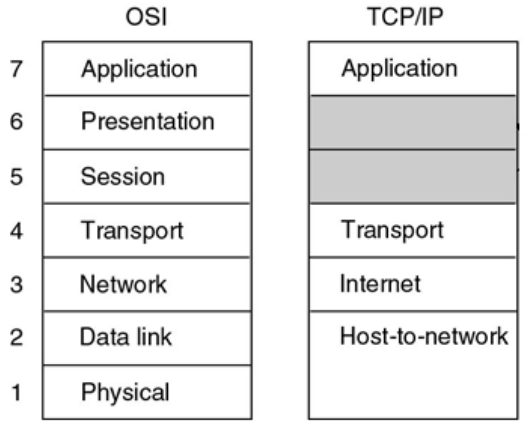
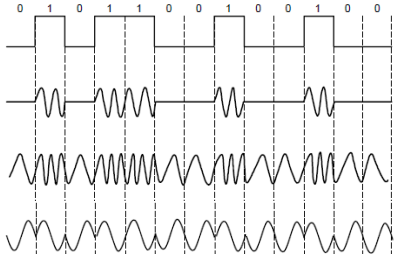
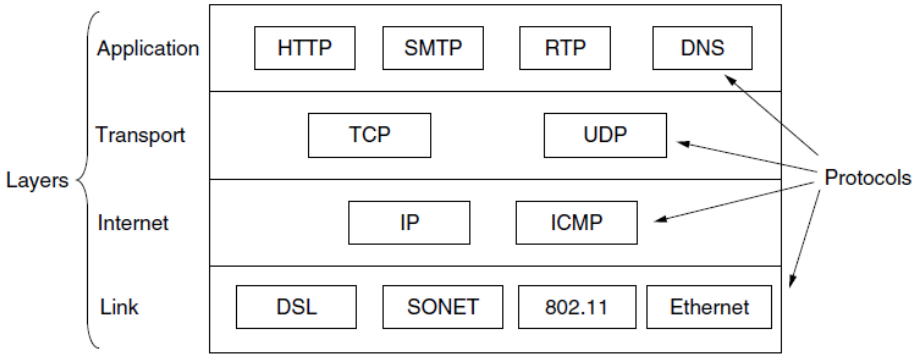
More about you?

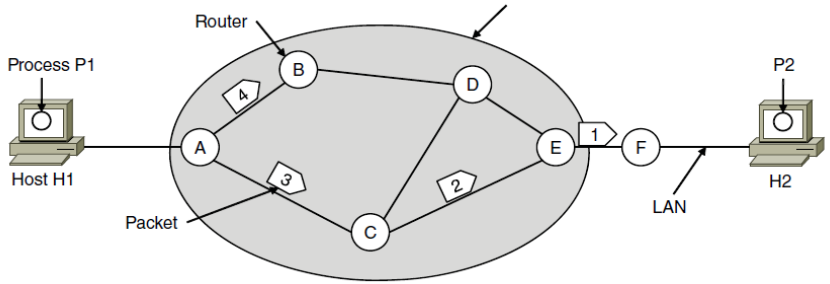
Overview of Topics

- **Basics of computer networks** through a study of layered models of computer networks and applications.
- **Main Topics**: Introduction to Internet, reference model layers, protocols and services, data transmission basics, interface standards, network topologies, data link protocols, message routing, LANs, WANs, TCP/IP suite, detailed study of common network applications…









Lectures

- **3 lectures per week for 12 weeks**
  - Online lectures, the recordings will be available after class on Canvas
  - Mondays 1:00 pm – 2:00 pm
  - Tuesdays 3:15 pm – 4:15 pm
  - Fridays 1:00 pm – 2:00 pm

Tentative Schedule

Week	Topic	
1	Introduction	Ling
2	Physical Layer	
3	Data Link Layer	
4	Medium Access Control	
5	Network Layer	
6	Network Layer	
7	Transport Layer	Usman
8	Transport Layer	
9	Application Layer	
	Non-teaching period	
10	Application Layer	
11	Network Security	
12	Review	

Tutorials

- **1-hour tutorial per week for 11 weeks**
  - Starting from Week 2, online via Zoom
  - Tutorials are the key place to solve questions interactively, measure and test things and get help for projects
- Tutors
  - Rahul Sharma
  - Shashikant Ilager
  - Muhammed Tawfiqul Islam
  - Yifei Wang
- Each tutor will set their own mode of contact and consultation method, please meet them in your tutorials next week

Time		Tutor
Tue	2:15 pm	Tawfiqul
Tue	4:15 pm	Tawfiqul
Wed	11:00 am	Yifei Wang
Wed	3:15 pm	Yifei Wang
Wed	4:15 pm	Yifei Wang
Thu	11:00 am	Shashikant
Thu	1:00 pm	Shashikant
Thu	2:15 pm	Rahul
Thu	5:15 pm	Rahul

Each student is expected to attend the same tutorial through out the semester for their tutor to follow the progress properly

Subject Material

- **Canvas LMS** is the primary portal for the subject: https://canvas.lms.unimelb.edu.au/
  - Announcements
  - Lecture and tutorial materials
  - Assessments
  - Grades
  - Discussion forum
  - Other subject information: handbook, academic integrity, guides etc.

Communication

- **Announcements on LMS**
- **General enquiries: Discussion forum on LMS**
  - Check discussion forum regularly
  - We encourage all students to join in discussions – answering other students' questions is one of the best ways to improve your own understanding
  - Please do not post sections of your assignments publicly!
- **Personal/private concerns: Email the instructors**
  - Please include "COMP90007" and your student ID in email subject
  - If you email us about a general enquiry, we may ask you to re-post your question in the forum

Assessments (1)

- **2 Assignments**, 5% of total mark for each
  - Similar to tutorial questions
  - Good preparation for exams
  - One for each half of the semester, they will be due around week 6 and 12 respectively
- **2 Projects**
  - **Project 1**: hands-on networking experience/measurements, 10%

  This project will cover the first half of the semester in terms of your practical work and will be due around Week 8. (There will be a lecture related to this soon)
  - **Project 2**: written report on a networking related topic, 15%

  You will do some research on an emerging topic in networking. This will cover the second half of the semester and will be due around Week 12.

Assessments (2)

- **Midterm exam**, 5%
  - A 45 minute test, during class time via LMS around Week 7
  - Covers first half of the semester
  - A good chance to test yourself and learn about types of questions you may get in the final

- **Final exam**, 60%
  - Centrally timetabled
  - Questions are similar to other assessments that you will work on during the semester

    NOTE: Reading the book in the last minute will not help as there will be just too much material to cover

Assessments (3)

- **All assessments are individual work,** no team projects in this semester.
- **Hurdle on assessments**, i.e., 50% per assessment except the midterm
  - 50% overall
  - 50% in the homework assignments
  - 50% in the hands-on project and technical report-based project
  - 50% in the end-of-semester written examination

  This means just doing the final exam well is not enough to pass the subject

Academic Integrity

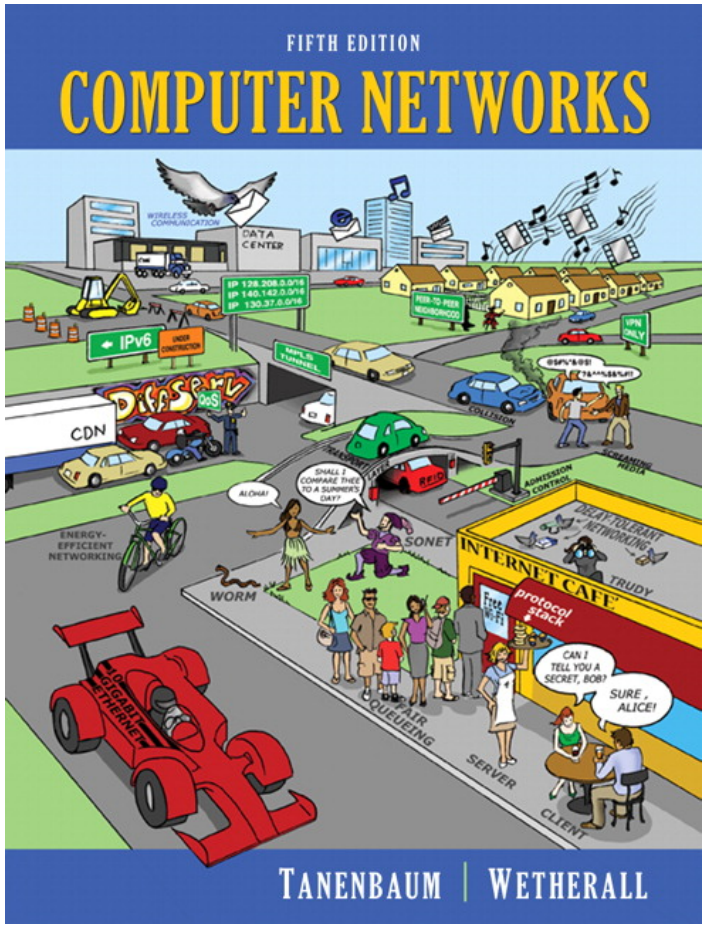
- More information: https://academicintegrity.unimelb.edu.au/
  - Plagiarism: Presenting the work of another person as your own
  - Self-plagiarism: You cannot re-use any part of your work that has already been submitted for assessment without proper citation.

Textbook

- **Computer Networks, 5th Edition** By: Andrew S. Tanenbaum; David J. Wetherall, Publisher: Pearson

  Library has online version (link on LMS)

  Suggested readings will be posted on LMS each week



FAQ

- Will I have to program extensively in this subject? **No, but you need to know 1 programming language to comprehend some concepts**
- What if I have some background in networking? **Consider applying for credit now**
- Will there be team projects? **Not in this semester**
- What would the final exam be like? **Nothing surprising if you attended the subject with a genuine effort on all fronts**
- What is examinable in the exams: **Everything, you will know how much you need to know about each bit once you listen to the lectures/tutorials**

QUESTIONS?