ECPE / COMP 177
Fall 2016

Computer Networking

Some slides from Kurose and Ross, *Computer Networking*, 5th Edition

Logistics

- Instructor: Dr. Jeff Shafer
  - Email: jshafer at pacific dot edu
  - Office: Anderson 205
  - Office hours *(posted on my door)*
    - Monday: 1:30-2:30pm
    - Wednesday: 1:30-2:30pm
    - Thursday: 10:00-11:30am

Logistics

- Lecture
  - When: Tuesday / Thursday, 8-9:45am
  - Where: Chambers 114
- Lab
  - When: Monday, 3:30-6:30pm
  - Where: Baun 214
  - Lab start date: Monday Sept 12th
    - *Next Monday is Labor Day holiday…*

Logistics

- Course websites:
  - http://ecs-network.serv.pacific.edu/ecpe-177
    - Slides, syllabus, schedule, assignments, and more
  - http://canvas.pacific.edu
    - Canvas for assignment submission and emails only
    - Should auto-signup if enrolled in course

Pre-Requisites

- COMP 53 – Data structures
  - Programming in high level language
  - Basic data structures, arrays, pointers, functions, system calls, …
- ECPE 170 – Computer Systems and Networks
  - Linux / command-line usage
  - C programming

Course Vision

*What do I, as an **application programmer**, need to understand about computer networks (including software and hardware both on your computer and elsewhere on the network) in order to write efficient, high-performing programs?*

Course Format

- Labs – 10%
  - Applying theoretical concepts to real-world network equipment (Cisco routers and switches)

- In-class Presentations – 10%
  - Two presentations

Course Format

- Exams
  - Midterm Exam – 10%
  - Final Exam – 10%
  - Lab Practical Exam – 10%

Course Format

- Projects – 50%
  - 5 programming projects using network sockets
  - Individual
  - Implementation platform: Linux
  - Python (3.4+)
- *Past projects:*
  - *Web server (basic) + web server (parallel)*
  - *Latency / bandwidth measurement tool*
  - *Instant messenger / file sharing client*

Survey

- Will have in-class project work days throughout the semester
- A laptop to bring to class would be ideal
  - Must be able to run Linux (either in a virtual machine, or dual boot)
- Do you have a laptop?
- Do we need an alternate plan? (USB key booting…)

Questions?