CSE342: Fundamentals of Internetworking

Instructor:
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- Office hours: on web

Others:
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Students:
- Little or no networking background
- Can program in C/C++
  - Have taken CSE109/411
- Juniors/Seniors/Graduate
- Interested in learning:
  - How the Internet works
  - How to program network apps

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Offline course resources

- *Computer Networking: A Top-Down Approach Featuring the Internet* (5th Ed)
  - by Kurose and Ross (2010)

- *TCP/IP Sockets in C: Practical Guide for Programmers* (2nd Ed)
  - By Donahoo and Calvert (2009)

- *C: A Reference Manual* (5th Ed)
  - By Harbison and Steele (2002)
  - Optional, but you need to have some C (not C++) reference book
Online course resources:

- **Course home page:**
  - [http://www.cse.lehigh.edu/~brian/course/inter-networking/](http://www.cse.lehigh.edu/~brian/course/inter-networking/)
  - Lecture notes, labs, syllabus, announcements, links to other resources, etc.

- **Primary textbook:**
  - Register for online access to supplementary materials

- **Blackboard**
  - Online discussion, solutions, turn in homework
Workload and grading

Course organization:
- Three lectures
  - Here, Packard 360
- One lab (2.25 hours)
  - Thursdays
  - In PL122 (Sun lab, default)
  - Or occasionally PL112 (Sandbox lab)

Workload:
- Homework, pop quizzes
- 2 hourly quizzes + final exam
- Laboratory exercises
- Programming projects

Grading (tentative):
- 20% Homework, participation
- 25% Semester projects
- 30% Three hourly quizzes
- 25% Final exam
Projects and policies

One major project:
- Laboratory exercises will prepare you
  - learn details of programming interface
- Demonstrate your project in lab
- Will be fun!

Three minor projects
- Primarily in C
- Reinforce concepts

Policies:
- Assignments due by midnight
  - 10% drop per day when late
  - Not accepted after answers posted
- Work must be yours alone
  - See syllabus for plagiarism statement
Course outline

**Syllabus:**
- We will follow the text pretty closely
- Covering network applications all the way down to bits on a wire (or in the air)
- A syllabus and a schedule are online

**Ready to begin?**
- Questions?
- Easy homework:
  - Read chapter 1
  - Think about a question about the material you read that you want to ask, or want to have discussed in class
Compared to past years

- C intro/review time (starting today!)
- Chapter slides online ahead of time
- Less formal class time
  - Try to avoid lectures
  - More problem solving
  - More student involvement
  - More discussion
- Keep hands-on lab time
- Retain fun final project