CS525z
Multimedia Networking

Spring 2002
Mark Claypool

Topics
- Background
- Admin Stuff
- Motivation
- Objectives
- Multimedia!

Professor Background
(Who am I?)
- Dr. Mark Claypool (professor, “Mark”)
  - “Quality Planning for Distributed, Collaborative Multimedia Applications”
  - Systems guy
- Research interests
  - Networks (routing, congestion)
  - Information filtering (collaborative filtering)
  - Multimedia performance

Student Background
(Who are you?)
- Name
- Year (1st, 2nd …)
- Degree (MS, PhD, CE…)
- Area (CS, ECE, ND)
- Programming experience and language(s)
- Multimedia use?
- Other…

Syllabus Stuff
- http://www.cs.wpi.edu/~claypool/courses/525-S01/
- Class:
  - M, W 3:30-4:50
- Office hours:
  - M 9-10, W 1-2 or by appointment
  - See Web page
- Email

Text Book
- None
- Research papers, book chapters
  - Copied by me
  - Bound by you
- $5 to dept office
- Read by you
- Presented by me
- Regurgitated on exam
- “Recommended” texts for projects
Topics

- Introduction
- Multimedia Transport Protocols
- Multimedia Multicasting
- Multimedia Perceptual Quality
- Multimedia Repair
- Media Scaling
- Multimedia Operating Systems
- Multimedia Retrieval
- Delay Buffering

Course Structure

- Prerequisites
  - Operating Systems (CS502, recommended)
  - Computer Networks (CS513, recommended)
  - Good programming skills (required)
  - No multimedia experience required
- Grading
  - Exams (50%)
  - Projects (50%)
  - Attendance (100% ... kidding)

Exams

- 2 exams
- 50% of grade
- Non-cumulative
- In-class
  - Closed-note, Closed-paper, Closed-friend
  - One-page “crib-sheet”
- Take-home
  - 2 days
  - On new paper
  - Open-note, Open-paper, Closed-friend

Projects

- 4 projects
- Implementation in Linux or Windows
  - Other platforms possible, but not supported
- Groups!
  - 2
  - One grade for all
  - Know material!
- Internet Phone Applications!
  - 1- audio, 2- working, 3-mcast ...

Slides

- On the Web, usually after class
  - Can see old class for slides
- PPT and PDF
- Caution! Don’t rely upon the slides alone!
  Use them as supplementary material
  - (come to class)
- See timeline and reading list, too

Why This Class?

- WPI CS requirements
  - (Gotta take something)
- Multimedia is cool!
  - algorithms, HCI, networks, hardware...
  - (Sex-appeal)
- Special-topics class
  - (Must be better than run-in-the-mill courses)
- Programming
  - The more you do, the better a scientist you are
  - Distributed systems
- Fun!