



CS525z



Multimedia Networking

Spring 2003
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
 - Congestion control (protocols, AQM)
 - 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-S03/>
- 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
- \$10 to department office (I’ll collect it)
- 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, recommend)
 - Computer Networks (CS513, recommend)
 - 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, not covered in class
 - Open-note, Open-paper, Closed-friend



Projects

- 4 projects
- Implementation in Linux or Windows
 - Other platforms possible, but not supported
- Programming individual, evaluation in groups of 2
 - Programming worth 2x evaluation
- Internet Phone Applications (audioconference)
 - 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!

