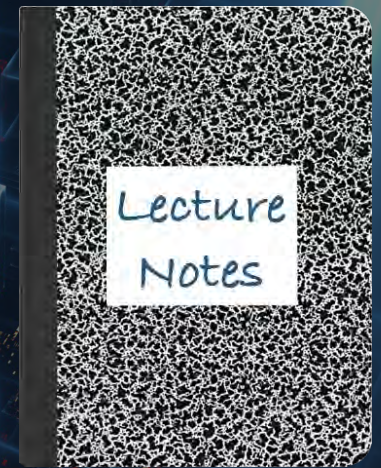


CS 417 – DISTRIBUTED SYSTEMS – FALL 2022

Week 1: Part 0
About the class



Paul Krzyzanowski

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Web site, contact, & class info

Canvas: <https://rutgers.instructure.com/courses/186676>

web: www.cs.rutgers.edu/~pxk/417

mirror: www.pk.org/417

email: pxk@cs.rutgers.edu

phone: +190.8799.8889

- No textbook for the course
- Course reading material
 - Lecture notes
 - Lecture slides
 - Published papers
 - Web documents

- **Short programming assignments: ~3**
 - Individual assignments
 - Due prior to the due date/time
- **Almost-weekly written assignments**
 - Most likely multiple choice or short answer on Canvas
 - Due prior to the due date/time
- **Collaboration & academic integrity**
 - Individual assignments – no copying!
 - All suspected violations will be reported to the Academic Integrity office

Grades

- Three exams

- Normalized grades:

$$\text{gpa} \cong \lceil 3.15 + (g - \bar{g})/\sigma \rceil \sim \mathbf{45\%}$$

- + 1 final exam: lowest of four exam grades dropped

- ~Weekly written assignments $\sim \mathbf{25\%}$

- ~3 Programming assignments $\sim \mathbf{35\%}$

This is subject to change!!

What we'll cover

Generally, one topic per week

- Faults
- Networking
- Communication
- Time
- Groups & replication, Consensus

- File systems: NAS, Parallel FS
- Distributed lookup
- Transactions
- Large-scale storage
- Content delivery

- Event streaming
- Parallel computation
- Clusters
- Security: Identity & authentication

What this course is *NOT*

- How to write web services
- How to use Azure, AWS, Google Cloud, etc.
- Big data analytics
- How to administer collections of computers

The End