

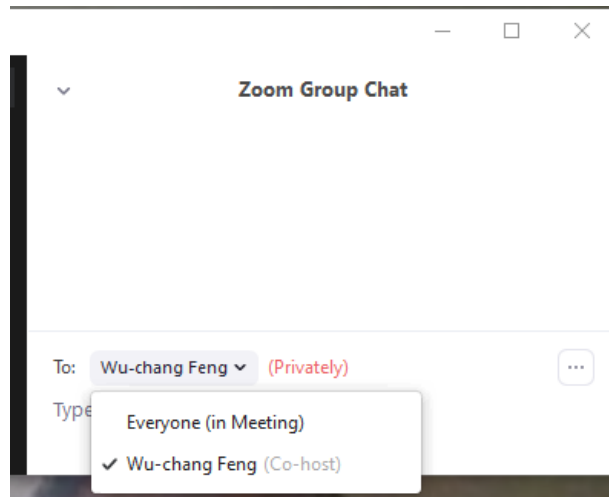
# Blockchain Development and Security

Wu-chang Feng

<https://thefengs.com/wuchang/courses/cs410b/>

# Zooms

- Recorded and uploaded to MediaSpace
  - You are welcome to turn your video off
  - Please ask questions via Zoom chat
    - To remain anonymous, send question to me privately



- To ensure I receive all questions, use the Slack channel for other communications during lecture.
- Mutual respect, tolerance, and encouragement are expected when participating
  - Report any issues to me via DM on Slack (@wuchang) or anonymously at <https://bit.ly/sayat-wuchang>

# About the course

- An introduction to Blockchains, development on them, and security issues related to them

## Course objectives

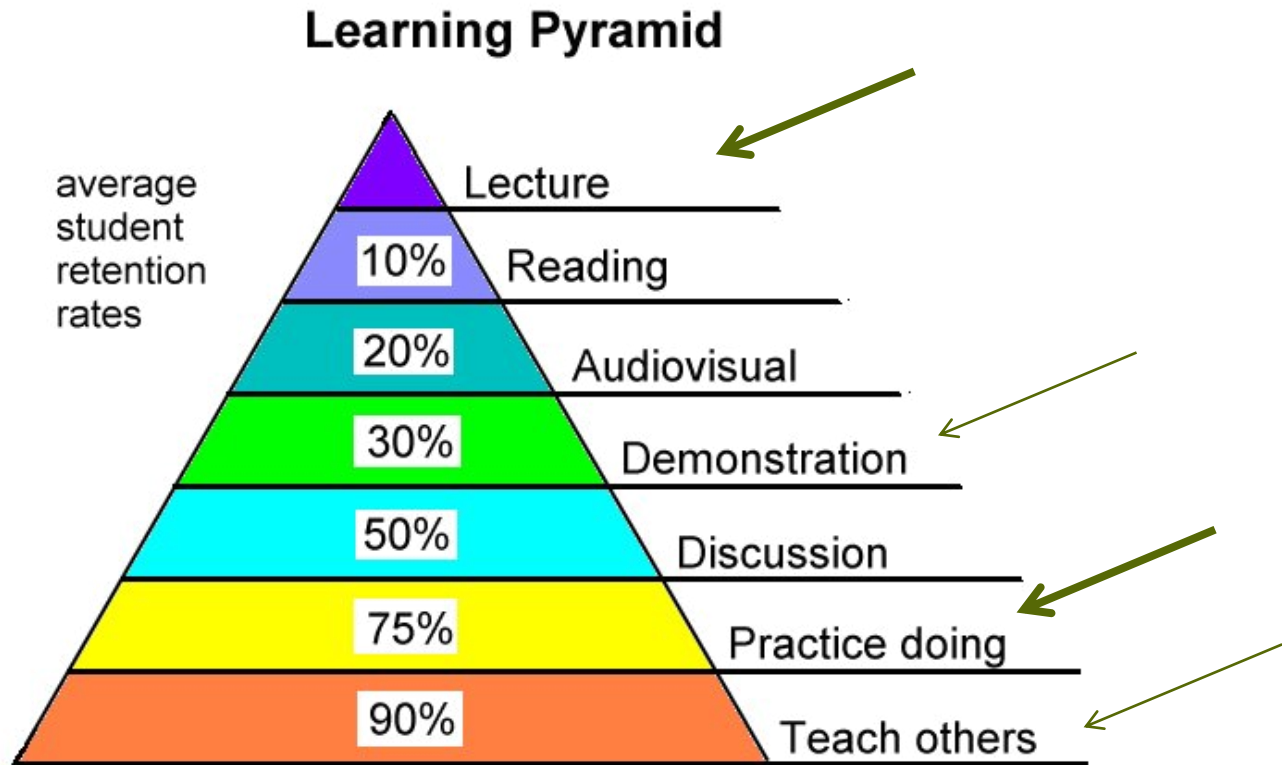
- Examine the underpinnings of blockchain systems and their applications
- Develop and deploy blockchain applications and smart contracts (DApps)
- Analyze smart contracts for security vulnerabilities
- Exploit smart contract vulnerabilities
- Use symbolic execution to automatically reveal smart contract vulnerabilities

# Assumptions

- Knowledge of Python (CS 161) or willingness to do work outside of class to learn it

# Format

- Lectures, labs, homework and projects



Source: National Training Laboratories, Bethel, Maine

# Grading

- Assignments
  - Each assignment should be completed individually, although you are encouraged to troubleshoot them with each other
  - Lab notebooks documenting completion of assignments must be kept and submitted via a private GitLab git repository shared with the instructor and TA
  - Assignments requiring code to be developed (except for CryptoZombies), must also be submitted via GitLab
  - Do not share code with each other

# Grading

- Late policy
  - Work will be pulled from your repository on the due date
  - Ensure that you check the web interface after you perform a "git push"
  - Late work may not be graded

# Grading

- Attendance
  - Google form [link](#) on web site
    - Will be enabled during Zoom for a short time
    - Battle of the CS courses
      - Submit a vote to be counted as present
  - Make up missed classes via participation on Slack channel
    - Answering questions, fixing bugs, troubleshooting problems for others
- Bring up web site
  - <https://thefengs.com/wuchang/courses/cs410b/>
  - Attendance, resources, schedule, due dates, grading breakdown
  - Lab 0 (Setup): Due Friday