

# Advanced Networking and Distributed Systems

## **Case Study: Distributed Education**

GW CSCI 3907/6907

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# We are going Distributed!

The rest of the semester will be online

Mix of:

- **Live online classes** (10AM Tuesdays), typically will be about one hour long. Recordings will be posted after class.
- **Videos**, made by us and others
- **Readings**, made by us and others
- **Exercises**, hands-on practice with microservices and distributed systems challenges

Let me know (@Tim Wood or [timwood@gwu.edu](mailto:timwood@gwu.edu))

- If you will be unable to join live classes
- If you need extra time to complete assignments
- If you are confused or need help!
- If you have any other concerns about the course

# Webex

Keep yourself muted

- Don't user raid your hand

But let me know if you can't hear me or miss something!

Use webex chat and/or Slack

# Key Resources

The website will be kept up to date

<https://gwadvnet20.github.io/>

Check the Tasks page for a list of all remaining assignments

We will give you regular deadlines for assignments, but will be lenient with extensions if you contact us about your special circumstances!

# Participation

Update your profile picture on slack and github.

- Use an image of yourself on Slack, but you can use anything you like on GitHub

Each week you must contribute to the discussion on Slack or in class **at least once**.

- This is twice as much as was previously required, but I think you are up for it!
- If you are ill, under quarantine, don't have internet, etc let me know and I will make exceptions

There will be bonus participation opportunities

- Watch slack!

# Q&A

Ask questions during live meetings

- Use “Raise Hand” in Webex or post to Slack

Ask or answer questions on Slack

Share or comment on distributed systems articles

Come to my virtual office hours

- Most likely in an evening

# Rest of the Semester

Week 11 (now): From Monolith to Microservices

- Go programming project

Weeks 12-14: Distributed Consensus

- Centralized vs Distributed architectures
- How can distributed replicas reach agreement?

Weeks 15: Cloud Services Wrap-up

- Distributed systems in practice

# Go Programming

Lucas taught me Go and VS Code!

<https://gwadvnet20.github.io/wiki/go/>

Go will be used in two remaining assignments

If I can figure it out, you can too!