

CS 452/552

# Introduction to Cloud Computing

Instructor: Kartik Gopalan

# Course Information

- Class location: SL 206  
Class date/time: Tue & Thu 1:15PM-2:40PM
- Instructor: Kartik Gopalan  
Office: Q-17 ENGB  
Office hours: Tue-Thu 10am-11am
- TA: Yu Sun  
Office hours: Wed & Fri 10:30am-12noon
- Course email: [cloud-course@binghamton.edu](mailto:cloud-course@binghamton.edu)
  - This email reaches both Instructor and TA
- Course Zoom link: <https://binghamton.zoom.us/j/99523961933>
  - Password: 552
  - This link is for both class and office hour.
- Join Google Classroom using your Binghamton account
  - <https://classroom.google.com>
  - Use class code 2qqz6yb

# Coverage of Topics

- Cloud computing introduction
- Virtual Machines
- Containers
- Confidential computing
- Micro-services and orchestration
- Serverless computing
- NoSQL Databases
- Big Data programming frameworks
- Network Virtualization: Software-defined networks
- Storage Virtualization: Block and Object Storage
- Other topics as appropriate

# Course Structure

- 25% for midterm (Time: TBD, Loc: in class)
- 25% for final exam (Time: TBD, Loc: TBD)
- 50% for 3 or 4 projects

# Course Material

- Lecture slides and papers posted on the Google Classroom
- Recommended textbook (not required):
  - Andrew Tanenbaum, Modern Operating Systems, 4th edition
  - Another good book is Operating Systems: Three Easy Pieces, Remzi H. and Andrea C. Arpaci-Dusseau (available online)

# Resources you need

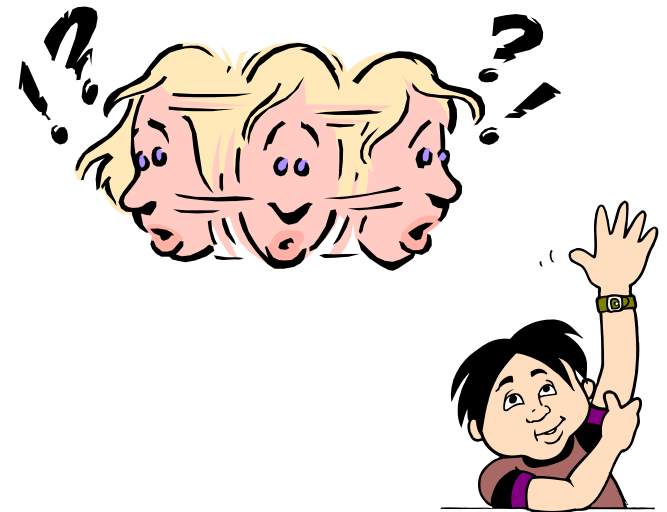
- Access to Google Classroom
  - <https://classroom.google.com/>
  - Use class code : 2qqz6yb
  - Join using your Binghamton email address
  - For class materials, announcements, assignment submissions, and online homework
- BU Email account
  - <yourid>@binghamton.edu
  - For communicating with me and TA
  - For receiving announcements
- Google Cloud Platform or some other VM infrastructure
  - Details to follow.
- CS LDAP Account
  - To log into machines in G-7, N-01, and [remote.cs.binghamton.edu](https://remote.cs.binghamton.edu)

# Students with disabilities

- Please contact the SSD office for accommodations.
  - <https://www.binghamton.edu/ssd/>
  - Phone : 607-777-2686 (Voice, TTY)
  - Fax: 607-777-6893
  - Email: [ssd@binghamton.edu](mailto:ssd@binghamton.edu)
  - Office Location: University Union, Room 119
- Talk to them soon. They will send me a letter listing any accommodations required.
- Don't hesitate to tell me if some aspect of the class is not working for you.
  - I will promptly work with you and SSD to fix it.

# Asking questions

- Email us : [cloud-course@binghamton.edu](mailto:cloud-course@binghamton.edu)
- Attend online office hours
- Make Google your friend
  - Can't beat the response time!
- Ask early
  - Don't wait till the last minute
- Direct feedback is always welcome.
  - Especially in the middle of the semester





# Stressed?

- Maintain perspective
- If you are overwhelmed with this course, talk to me.
- Campus resources:
  - University Counseling Center:
    - <https://counseling.binghamton.edu/>
    - 607-777-2772
  - Dean of Students Office:
    - <https://www.binghamton.edu/dean-of-students/index.html>
    - 607-777-2804
  - Interpersonal Violence Prevention:
    - <https://www.binghamton.edu/centers/varcc/ivp/index.html>
    - 607-777-3062
  - Office of International Student and Scholar Services:
    - <https://www.binghamton.edu/international/student-scholar-services/index.html>
    - 607-777-2510

# Academic Integrity

- Please read the policies on course web page
- Do your own work.
- Don't do others' work.
- Don't ask/give solutions, including code.
- Don't get code from the Internet.
- Keep your code/assignments private
- Dishonesty →
  - You can get an F grade
  - Be referred to the Dean's office

# Attendance Policy

- Attendance is mandatory
  - either in-person or synchronously on zoom.
- Attendance will be taken
  - via a Google Form during class
- Maximum three unexcused absences allowed.
- More than three absences may reduce your final grade by one level.
  - For example, A will become A- or B will become B-

# Sickness Policy

- If you feel sick, please do not come to the class.
  - Please attend via zoom, if you can.
- If you are coughing or sneezing, please consider wearing a mask as a courtesy to others.

That's it for today!  
Happy semester!