

# Welcome to CSCI 235



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Hunter College of The City University of New York

# Today's Plan



Introductions

Logistics (Rules of the game)

Course objectives and how to succeed



**Prof. Ligorio**

# Introductions

## Undergraduate Teaching Assistants



**Alvin**



**Adrian**



**Arsen**



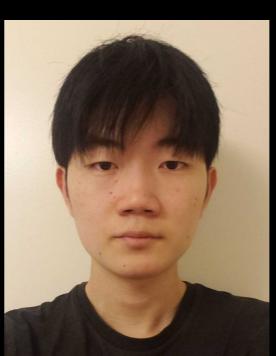
**Daniel**



**Georgina**



**Ishraq**



**John**



**Kazi**



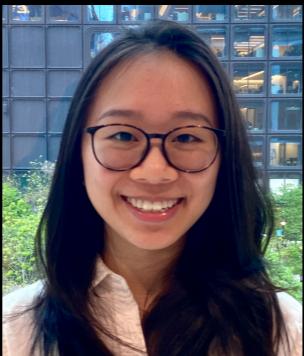
**Kyle**



**Michael**



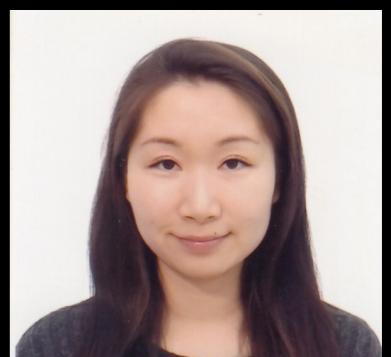
**Michelle**



**Rita**



**Sami**



**Sue**

# Acknowledgments

This course was designed with input from many great resources, in addition to the required textbook.

Many thanks for materials and inspiration to

Simon Ayzman

Susan Epstein

Keith Schwarz

Ioannis Stamos

Stewart Weiss

# Assumptions

You are here because

1. You want to major in CS
2. You want a career in CS
3. You love CS :)
4. You want to learn algorithms and data structures (and programming)
5. *You need to be proficient with 4. by the time you complete this course* (and you won't be able to do any of the above unless you do)
6. Great news: if you **PROACTIVELY** follow our recommendations, you will!!!

# Large Lecture

~300 students

I must be organized and you must be proactive!

- Lot's of milestones to completion, but all laid out in advance
- Not much flexibility (e.g. no late submissions), but plenty of time to work on assignments: must plan ahead!
- Proactively work on assignments
- Proactively seek help (especially if you realize you are lacking background material!!!)
- Keep on coming to class!

# Logistics

Blackboard, Course Webpage

Lecture, quizzes and responsibilities

Syllabus, Programming Guidelines

Programming Projects (Gradescope + Github Classroom )

Linux Accounts

Communication and Help (Ed Discussion & Lab  
1001B Tutoring and Office Hours)

Your first assignment.  
**MUST READ!!!**

# Blackboard

All **email** sent through Blackboard

You are responsible for reading all course email

All emails also posted as **Announcements** on  
Blackboard

**Course Materials/Resources** for help with  
background

**Course Materials/Projects** for project access

**Course Materials/Exams** for solutions

# Course Webpage

[https://tligorio.github.io/CSCI\\_235/](https://tligorio.github.io/CSCI_235/)

Visit regularly for:

Tentative Schedule with:

- Lecture Slides
- Due dates
- Study questions



# Active Involvement

This will not be a spectator sport

Be ready to get your hands dirty!



# Syllabus

**MUST READ!!! It was you assigned reading for today.**

**No Makeups**

**No Late Submissions**

**NOTE SOME EXAM AND QUIZ QUESTIONS WILL BE DIRECTLY BASED ON THE PROGRAMMING PROJECTS**

| Component            | Per Item %  | Total % |
|----------------------|---|---------|
| Lecture Attendance   |   | 5%      |
| Weekly Quizzes       |   | 5%      |
| Programming Projects | Project 1 5%, all others 9%<br>No project extra-credit available.<br><b>The lowest project grade will be dropped.</b><br>If project 1 is dropped, the remaining projects will count up to 50% maximum | 50%     |
| Exams                | Midterm Exam 10%<br>Final Exam 30%  | 40%     |

**There will be no makeup exams. If you miss the midterm exam due to a documented emergency, the final exam grade will replace it.**

# Extra Credit

**Interview Prep: Online Assessment Workshop**

**+2 EC points towards course grade based on attendance**

**More information coming soon**

# Gradescope

Platform for assignment submission:

- Weekly Quiz
- Programming Assignments

You should have received email invitation.

If not, post on Ed Discussion in “Still don’t have access to Gradescope?” Post.

# Attendance

5% of final grade.

- Make sure yo get an attendance sheet from the UTA at the door **UPON ARRIVAL**, at the **BEGINNING** of lecture.
- Submit it back to the UTA at the end of lecture
- We won't give out attendance sheets at the end of lecture

# Weekly Quizzes

5% of final grade.

Available on Gradescope on the due date.

Timed quiz: 15 minutes from when you start.

Review of previous week's material, study first!

# Programming Projects

**7 programming projects**

(approximately one project/2 weeks)

No extra-credit project - **lowest project grade will be dropped**

**MUST READ:** Programming Guidelines document on course webpage

**Projects due by 11pm on the due date**

**No late submissions will be accepted**

# The Project Specification

The assignment document that describes each project

Our contract (**I am** your employer or, better, **your client**)

**Read carefully and ask questions** before you begin coding

**Your submission must fully comply with this document**

If you don't pass a Gradescope test, come back here and read again to understand how your submission differs from the requirements

# Project Grading

Unless otherwise specified:

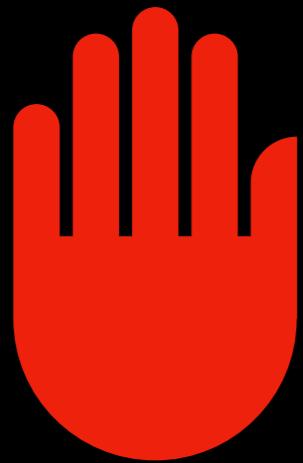
80% correctness

- a **complete submission** that does not compile will receive 40 points total (including documentation and style/design)
- incremental development
- version control -> submit latest working version for partial credit

15% documentation

5% style and design

All occurrences of plagiarism will be reported to the office of student affairs **with no exception**.



# Plagiarism

- Submitting to Gradescope does not mean no one will look at your code
- You are encouraged to work in groups, but you must ultimately code and debug your own project!
- If you use generative AI, indicate so in a comment, but be careful!!!
  - It is often wrong, not always in obvious ways
  - If you rely on it too much, it may change your coding experience in ways that may harm you when job seeking
- Claiming that someone else's work is your own is immoral, unprofessional, and it harms the reputation of our Department and of Your degree
- **We check for plagiarism and report ALL cases to the office of student affairs**
- Sadly, lately we have reported several cases

# Generative AI

Add comment “Adapted from AI-generated code” in the function preamble of EACH function you start this way.

Be careful!

It is often incorrect, you must thoroughly test and debug

You may be giving up learning skills that you need

It is a great tool for increasing productivity, it may not be so great for learning

Don’t rely on it too much and make sure you are learning the skills you are supposed to learn here!

# Gradescope via Github Classroom

To be used for submission of ALL programming projects

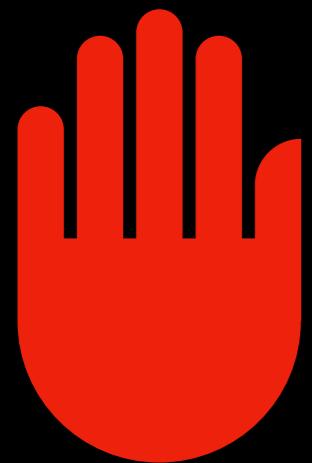
If you haven't done so already, login to **Gradescope ASAP**

**Check your email and follow invitation instructions for Gradescope**

**Let us know on the discussion board if you did not receive email invitation. Check your Blackboard email and spam first!!!**

**Instructions for Github Classroom will be provided with your first assignments.**

Gradescope is not for  
Testing and Debugging!!!



# Testing and Debugging

You must know how to and **use a Debugger**

You must **code and test incrementally**

You must **code and test locally**

You must also **test on the Unix lab machines**

To help you, Gradescope will only tell you which test you failed, no other feedback will be provided

Gradescope will accept at most 5 submissions per day

# Linux Accounts

## **MUST HAVE!!!**

- Login to new account as soon as you receive email (look for it in your Hunter mail in the next few days)
- Reclaim your existing account otherwise it will be deleted (type touch **spring.2024** at the terminal after logging in)

## **Assignment 1 (BASELINE, not for submission) :**

using your Linux account, upload `hello_world.cpp` to a machine in the Linux lab, then remotely compile using `g++` and run your program. This will guarantee that a program that runs locally will also run correctly on Gradescope

## **Follow instructions in:**

- Programming Guidelines document on course web page and
- the Department's Linux Information page: [compsci.hunter.cuny.edu/~csdir/](http://compsci.hunter.cuny.edu/~csdir/)

# Communication and Help

# Ed Discussion

Discussion board

<https://edstem.org/us/courses/54804/discussion/>

# Let us hear from you!

Ed Discussion for Q&A

Check your email for invitation

Drop-in Tutoring in Lab 1001B Hunter North (10th floor)

11:30am-5:30pm Mo - Fr

Office hours

Tuesday and Friday 11:30 - 12:30 in Room 1001K

(Through 1001J), on the 10th floor of HN

I hope to hear from all of you regularly!

# Be Proactive so that we Can Help!

**If 200 students show up for help or start a forum thread on the project due date (or a few days leading up to it) it will not be possible to help everyone at once!**

Please be proactive, start early and plan ahead!

# Questions and Forum Etiquette

Different prior exposure to the material

**All questions are good questions!!!**

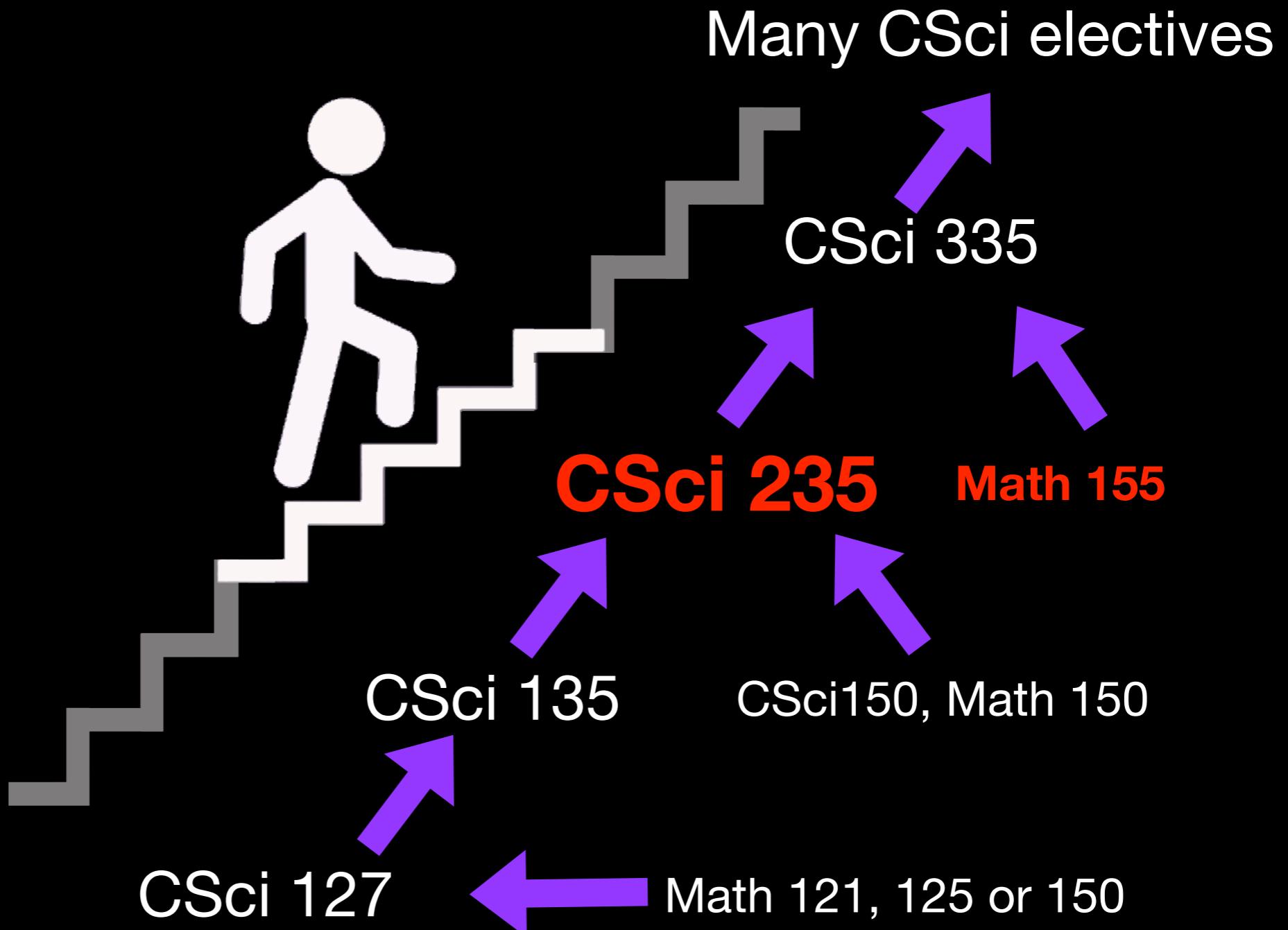
Friendly and collegial environment - we are all here to learn and help

Always be respectful and professional!

# Course Objectives

# Software Design and Analysis

## sequence and prerequisites



# What is CSCI 235?

Programming => Software Analysis and Design

Expected professional and responsible conduct



- **Communication Skills:** read and understand specification, ask and answer questions!
- **Time and Task Management:** start early, respect deadlines
- **Independent Learning:** explore the standard library (find substring, read from file) and the STL
- **Professional Results:** all code must be tested (correct) and documented

Think of me as your supervisor on your next internship or a potential client of your new startup - submit quality work on time!!!

# What is CSCI 235?



Think like a Computer Scientist:

Design and maintain complex programs

Software Engineering, Abstraction, OOP

Design and represent data and its management

Abstract Data Types

Implement data representation and operations

Data Structures

Algorithms

Understand Algorithm Efficiency

# Suggestions for Success

Complete the reading assignments ahead of lecture

Stay up to date with all course communication (email, announcements and discussion board)

Don't fall behind

Ask questions

Go to tutoring and office hours

Code Code Code!!!

Meaning: Design-Code-Test-Debug-Revise-Code-Test-Debug ...

START EARLY

Submit all assignments on time

Study well for quizzes and exams

# Recap



Introductions

Logistics

Course objectives and how to succeed

# Next Time

## OOP and Abstraction

