Welcome to CSCI 1300

Starting Computing

Fall 2023

Vinay Nagalapura Ramesh

Breaking the Ice

Vinay **N**agalapura **R**amesh. (Call me Vinay, or NR)

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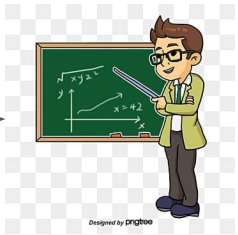
Office Hours: MW 10:15 am - 11:15 am at ECOT 743

Computer Science Major

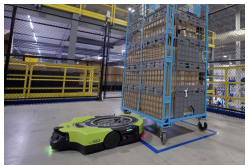
Software Engineer

Graduate Studies

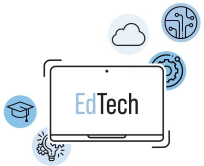


Professor??

Why Computer Science



It’s Everywhere!



A Bird's Eye of Computer Science

Computer Networks

Software Engineering

Algorithms

Programming Languages

Data Structures

Artificial Intelligence

Databases

Operating Systems

But what is Computer Science really?

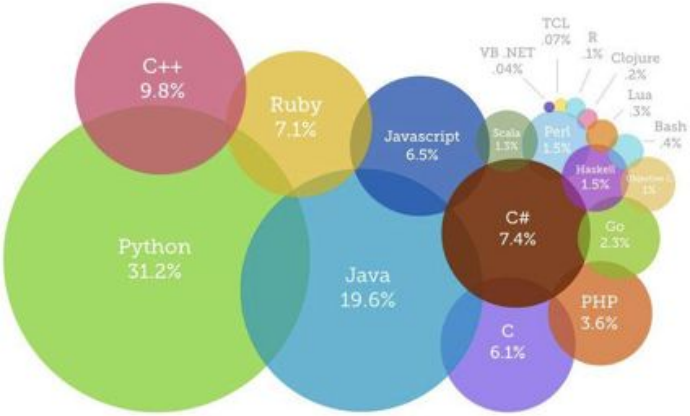
- The study of the principles and use of computers
- Discipline that spans **theory** and **practice**.
  - think in both abstract and concrete terms
- Uses **computational thinking** to solve problems
- Makes computers do new things or accomplish tasks more efficiently

Why should I take this class?

- To understand the fundamentals of computer science and programming
- To learn and adapt to computation thinking to solve problems
- To learn to program tasks that computers can understand
- Apply concepts of a programming language into anything you may learn in future.

Computer Programming

- The art/science of communicating with a computer
  - Learning its languages
- Writing useful, maintainable, and extensible source code which can be interpreted by a computing system to perform a meaningful task
- Learned SKILL – everyone can do it



Meet and Greet: C++

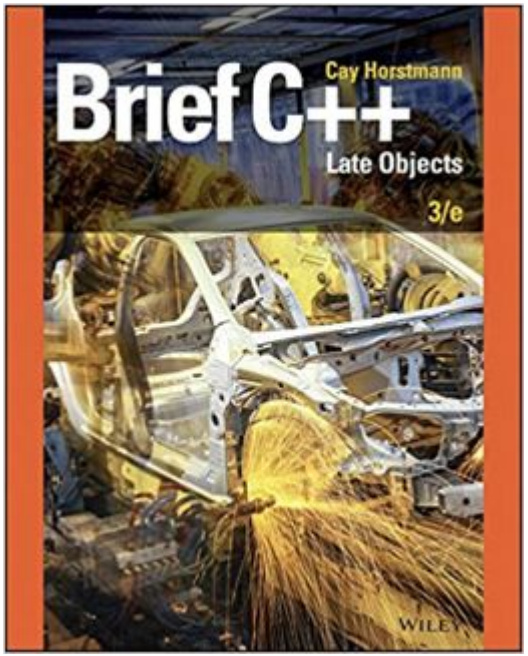
- Pronounced C plus plus
- Great mix of efficiency and easy to translate to other languages
- Visual Studio Code - The IDE for this course.
- Compiler and Debugger in one, but let’s use the command line terminal!

Primary Course Material

Brief C++: Late Objects 3rd edition, by Cay Horstmann

- Only available in electronic form
- International, old and PDF editions are okay, *but will lack online activities*, which we will do in lecture and recitation

Additional reading will be linked to the course Modules as needed



Let’s syllabus

You are responsible for knowing and reviewing:

- Exam policy
- Assignments and late submission policy
- Attendance policy
- Classroom behavior
- Collaboration and honor code
- Office Hours policies
- Ed Discussion policies
- Interview policies
- Discrimination and harassment
- Disability accommodations
- Religious observances
- Sexual misconduct, discrimination, harassment and/or related retaliation

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Three (3) midterms

Syllabus: “score of at least a 67% average on the midterms or you cannot receive better than D+ in the course.”

The final exam time slot can be used to take an optional final. However, the final exam score will replace your lowest midterm score.

Let’s syllabus

Workload:

- Homeworks (30%)
- Projects (20%)
- Weekly recitation activities (10%, drop lowest): Attendance in recitations is required.
- Midterms (30%): 67% exam average required to earn a C- or higher in the class
- Class participation (10%, drop 3 lowest)

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Back up your work!

- Google Drive
- Dropbox
- GitHub (private repository)
- No extensions in event where you didn’t back up your work

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Recitation:

- Weekly, mandatory 75 minute lab with programming activities.
- Ask questions about assignments and get extra help.

Attendance Policy

- You must attend recitation each week
  - Your TA will take attendance
- Recitation materials will be posted on Friday the previous week
  - Weekly graded discussion will happen in recitation
  - Time to work on recitation assignments and ask questions
- If you need to miss recitation, make arrangements to go to another recitation: email **both TAs** and csci1300@colorado.edu

Getting help outside lectures

Office Hours calendar on Canvas (TAs, LAs, instructors) – in-person

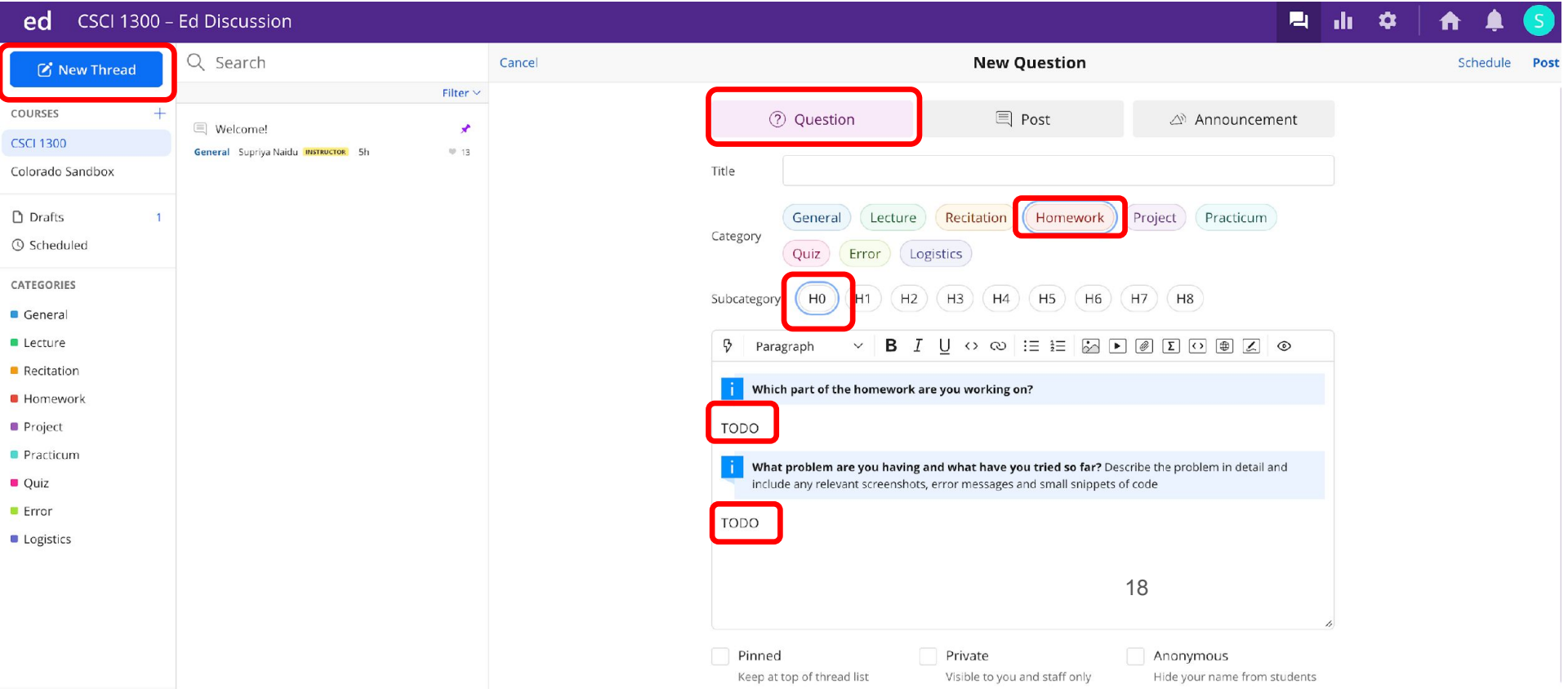
- *Learning Assistants (LAs)*
  - Undergrads who took this class and love programming. Many of them will lead recitations!
- *Teaching Assistants (TAs)*
  - Graduate students who are enthusiastic and excited about teaching!
  - Lead recitations, help grade, develop materials, field questions on ED, office hours

Ed Discussion

Invite link on Canvas

Announcements will be posted here

- Ask questions in Q & A forum (and answer other students' questions!)
  - There are hundreds of you and only a few of us -- get answers faster
- Discuss work, but **do not post solutions/vital code**
- Send **private** messages to TAs and faculty


ed
CSCI 1300 – Ed Discussion
New Thread
Search
Filter
COURSES
CSCI 1300
Colorado Sandbox
Drafts 1
Scheduled
CATEGORIES
General
Lecture
Recitation
Homework
Project
Practicum
Quiz
Error
Logistics
Welcome!
General Supriya Naidu INSTRUCTOR 5h 13
Cancel
New Question
Schedule
Post
Question
Post
Announcement
Title
Category
General
Lecture
Recitation
Homework
Project
Practicum
Quiz
Error
Logistics
Subcategory
H0
H1
H2
H3
H4
H5
H6
H7
H8
Paragraph
Which part of the homework are you working on?
TODO
What problem are you having and what have you tried so far? Describe the problem in detail and include any relevant screenshots, error messages and small snippets of code
TODO
18
Pinned
Keep at top of thread list
Private
Visible to you and staff only
Anonymous
Hide your name from students

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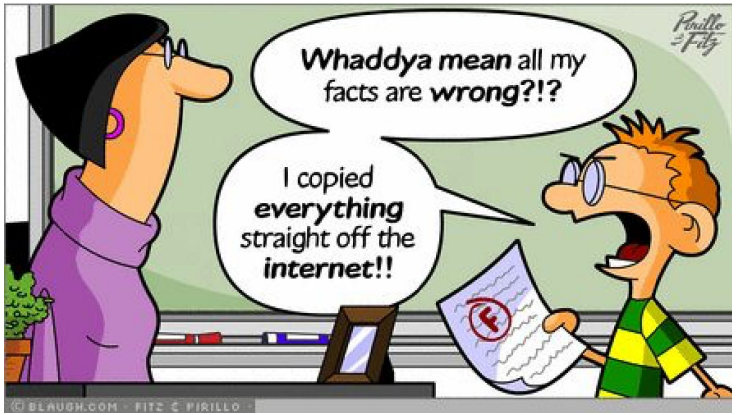
Academic Integrity

See the Course Policies tab on the Syllabus page for more details. Here are some highlights.

- "Examples of cheating include: copying the work of another student during an examination or other academic exercise (includes computer programming)"
- "Examples of plagiarism include: [...] copying information from computer-based sources"
- If in doubt, ask us if it's permitted.



Riding the struggle bus

It's ok to struggle (we all did and still do)

When you're asking for help, be sure to explain...

- what you're trying to do
- what you think should happen
- what you get instead (copy/pastes or screenshots work well)
- what all you have tried
  - if you haven't tried anything, try something first
- use **private** Ed posts (post a "Note") to Instructors if it includes possible solution code

Don't be stuck! Post on Ed, get help during Office Hours!

Due this week

- Read the Syllabus on Canvas
  - Take the **Syllabus Quiz**. Check the due date!
- Homework 0 - **Install VS Code**
  - Tutorials and videos on Canvas, based on the operating system of your computer
- Quiz 1 on Canvas
  - Check the due date!

Next Week….

Writing your first program