Final Exam

- Saturday, May 3, 8:30 AM
- FJ-B (Frazier-Jelke Lecture Hall B)
- Will cover all topics roughly proportionally to the amount of time spent on them in class.
- May involve ideas implemented in programming projects.
- I will provide practice problems for a few, but not all, topics.
  - Solutions can be discussed in office hours.

Final exam topics

- C++ intro stuff (not a lot)
- Pass by value, pass by reference
- Strings and vectors (handouts provided on exam)
- Structs
- Pointers and dynamic memory
- Recursion (including binary search algorithm)
  - You will probably have to write a recursive algorithm.
- Classes
- Operator overloading
- Inheritance and polymorphism
- Linked lists

Hint: Keys to the game: Know what a topic is, what it's good for, what it's bad for, how to use it, and how it relates to other topics.

Victory Lap

- A victory lap is an extra trip around the track
  - By the exhausted victors (us) ☺

- Review course goals
  - See if we met them
- Some big themes and perspectives
  - Stuff for five years from now more than for the final

Thank you!

- You all made this a great class
  - Great attitude about learning new CS topics
  - Good class attendance and questions
  - Occasionally laughed at stuff ☺

Thank you!

- My first time teaching this course.
- Feedback is appreciated on projects, tests, and their respective difficulty (too hard, too easy, just right?)

What is this class about? *(from lecture 1)*

- Learning more complex programming concepts.
- Use C++ language.
- Schedule
  - Python to C++ introduction
  - New C++ concepts
  - Object-oriented programming (OOP)

Abstraction

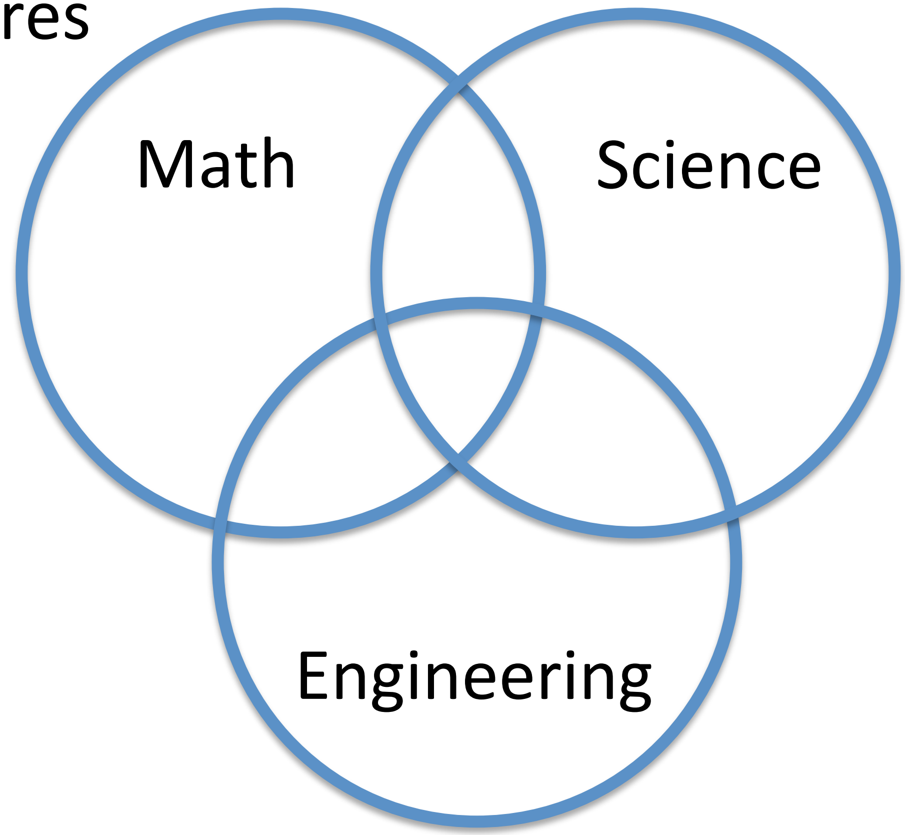
- CS is all about constructing hierarchies of abstractions
  - abstraction = leaving out details that we don't care about to focus on the stuff we do care about.
  - Some abstractions we create for ourselves
  - Some we create for other people using our code.

Abstraction

- Abstractions we've seen in CS142:
  - Structs (an abstraction of a combination of data types)
  - Classes (an abstraction of data types and associated actions)
  - Operator overloading (hiding the details of what it means when you say v1 = v2 + v3)

What's next?

- CS 241: Data Structures and Algorithms
- CS 172: Discrete Structures
- CS 231: Computer Organization



Stay In Touch

- Tell me when this class helps you out with something cool (seriously).
- Ask me questions (may not always know the answer, but I can tell you where to find it).
- Don't be a stranger: let me know how the rest of your time at Rhodes (and beyond!) goes… I really do like to know.

SUPERB
wallpapers
That's all Folks!