Class website

cs.rhodes.edu/142

What is this class about?

- Learning more complex programming concepts.

- Use C++ language.

- Schedule
  - Python to C++ introduction
  - New C++ concepts
  - Object-oriented programming (OOP)

Online textbook

- Interactive textbook (zyBook).
- Sign-up at zybooks.com
  - ***Must sign up with special code from class website.***
- Cost is $67.
- Includes examples, quizzes, and programming exercises.

Grading

- Programming projects – 40%
- Quizzes/zyBook – 10%
- Midterm 1 (Feb 15, in class) – 15%
- Midterm 2 (April 3, in class) – 15%
- Final exam (May 2, 1pm [11am section], or May 6, 1pm [12pm section]) – 20%

Working independently

- Rule: In working on an assignment, you cannot look at any **correct program** or **correct piece of code** for the same assignment which someone else has written.

Respect

- Respect your classmates and me during class times.
  - Pay attention in class, no phones, turn off your screen when asked to do so.
  - Please don't be late.
  - Please raise your hand; don't call things out unless I ask you to.
  - If you need to leave class in the middle, please raise your hand (or let me know ahead of time).

Differences from 141

- 142 is more than just a continuation of 141
- Moves faster
- Material is more complicated
- Less "hand-hold-y:" you will need to do more reading on your own and look things up more (I will give you these resources).
- More fun (hopefully)!

How to succeed in CS142

- Start projects early
  - They will take longer than 141 projects.
  - Bonus points for turning them in early.
  - Night before may no longer work.
- Stay current with reading and zyBook material.
- Ask questions in class.
- See tutors and me for help.

Introductions

- Name
- Class year
- Where you're from
- Favorite dessert

- Write a program where the computer picks a number from 1 to 100 and you have to guess what it is.
  - The computer will report whether each guess is too high, too low, or correct.
  - Report the number of guesses it takes to get it right.
- Write a program to simulate *a single turn* of the game "One is Zero:"
  - During a turn, you roll a six-sided die.
  - If you roll 2-6, you get that number of points and may roll again to get more points, or you may choose to end your turn.
  - As soon as you roll a 1, your turn ends, you lose any points you already received for that turn, and get zero points for the turn.
  - Print the total points you receive for that turn at the end.
  - If time, allow two players to alternate taking turns (points accumulate for each turn), and after 5 turns each, the game ends.