Comp Sci 142

What is this class about?

- Learning more complex programming concepts, especially object-oriented programming.
- Topics
  - Python to Java introduction
  - New Java concepts & OOP
- Is this the right class for me? Yes, if:
  - You took COMP 141 here
  - You have programming experience in a language like Python, Java, C, or C++, and feel comfortable implementing simple algorithms in that language.

Grading

- Programming projects – 35%
  - 2 code reviews
- Labs/Homework – 15%
- Midterm 1* – 15%
- Midterm 2* – 15%
- Final exam* – 20%
- *Weighted average of exams must be >= 65% to pass the class.

Code Reviews

- Twice during the semester, you will do a code review with me.
- This is where we sit down together and review your project code (after it is turned in) to find bugs, examine implementation choices you made, and see if the code can be improved.
- In industry, these are very common; helps you become a better software developer.

Working independently

- Out-of-class assignments must be done *independently*, however, you may ask others for help.
- Rule 1: Do not look at anyone else's code for the same project or a similar project (including AI-generated code).
- Rule 2: Do not write code or pseudocode with anyone else (including AI).

Use of AI

- Not recommended.
- If you are going to use it,
  - Use it as a tutor
  - Must be cited

- Overall: I don’t recommend having it write code for you. It will make you a weaker programmer and computer scientist.

Classroom guidelines

- Respect each other during class time.
  - 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.

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 COMP 142

- 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 class material; don't fall behind.
- Ask questions in class.
- See tutors and me for help.


Be curious.

- 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.