

CSC108H Lecture 1

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Welcome!

- ▶ Welcome to CSC108
- ▶ Comments or questions during class? Let me know!
- ▶ Previous experience: no programming experience
- ▶ Goals
 - ▶ How to solve problems using a computer
 - ▶ How to develop algorithms
 - ▶ Programming in Python
- ▶ Evaluation: class participation (5%), pre-lecture reading quizzes (4%), two assignments (20%), nine labs (9%), one test (17%), final exam (45%)

Welcome?

- ▶ Of course, I want you in my class, but ...
- ▶ Is CSC108 the right course for you?
 - ▶ CSC148: assumes knowledge of Python and object-oriented programming (i.e. what you learn in CSC108); focuses on data structures

Huh? I Can't Sleep in Class?

Well, you can, but:

- ▶ Class participation is worth 5%
- ▶ But that's not the most important reason
- ▶ Learning is enhanced when we are actively engaged in and questioning the material
- ▶ You will have opportunities to discuss solutions to problems rather than listening to me the whole time

How Lectures Work

- ▶ We are using a technique called Peer Instruction (PI)
- ▶ I present a short summary of a key topic and then ask a question
- ▶ You think about it for a minute, on your own (no talking just yet, please)
- ▶ You anonymously report your answers
- ▶ Then, you discuss that same question with a small group of your neighbors, trying to convince them of your reasoning
- ▶ You come to a consensus with your group
- ▶ You report your revised answers, and we discuss as a class

How Lectures Work...

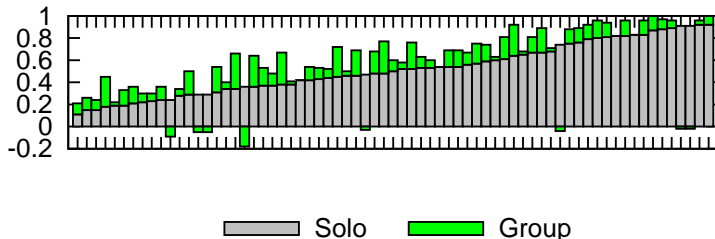
- ▶ On occasion we will extend this pattern
- ▶ e.g. I might ask you a follow-up question but with no group discussion
- ▶ e.g. I might make up new questions on the spot if I notice difficulties
- ▶ I'll clearly indicate what we are doing for each question

What's the Point?

- ▶ Helps you assess your own understanding
 - ▶ Did you answer correctly? Why did you choose your answer? Why are the other answers incorrect?
- ▶ Helps you think through the ideas of other students
 - ▶ Explanations of other students (correct or incorrect) can help you gain a better understanding of the topic
- ▶ Let's me know where difficulties are arising, and how to address them

Where's the Evidence?

- ▶ Each bar represents the solo vote correctness (gray) and the group vote correctness (green)
- ▶ On each question, on average 30% of students go from incorrect to correct



How we will use Clickers

- ▶ Please purchase an iclicker remote for this course (purchase through bookstore, register through <http://www.iclicker.com/registration>)
 - ▶ Please contact me if this is problematic
- ▶ I'll ask questions on the screen during lecture, to which you can respond with your remote
- ▶ After discussion, I'll display a graph with the class results on the screen
- ▶ We'll discuss the questions and answers
- ▶ You get points for participating

How to Vote

- ▶ Turn on the clicker by pressing the bottom “On/Off” button
- ▶ A blue “Power” light will appear at the top of the remote
- ▶ When I ask a question in class (and start the timer), select A, B, C, D, or E as your vote
- ▶ Green light: your vote was sent AND received
- ▶ Red light: error! Vote again!
- ▶ You can always change your vote while the timer is going — your last vote is the one that counts

Clicker Tips

- ▶ If you bought a used clicker, replace all three AAA batteries
- ▶ Do not use Duracell as they are TOO short for the casing
- ▶ Do not use rechargeable batteries. They harm the clicker
- ▶ Register your clicker before our next class
- ▶ Before using a new clicker for the first time, pull the plastic tab out of the battery compartment
- ▶ Bring your clicker to class every day! Make sure your remote is on when voting!

Reading Quizzes

- ▶ Before each lecture, you'll complete a short reading quiz online
- ▶ Why?
 - ▶ You have to be prepared for class for our discussions to be productive
 - ▶ I can then focus on difficult parts of the material and new examples
 - ▶ I will not teach you the textbook in class (you know how to read!)

Grading

- ▶ You are graded on the quality of your participation in class, not on the correctness of your answers
- ▶ You are graded on the completion of reading quizzes, not on the correctness of your answers
- ▶ In this course, we use an absolute grading scale (no bell-curve)
 - ▶ I want you to feel comfortable discussing and understanding ideas with other students

Sample Clicker Question

What is the best thing to do on Reading Week?

- ▶ A. Party like crazy, and then get back to work next week
- ▶ B. Read and study for the entire week
- ▶ C. Stay in bed as much as possible
- ▶ D. Catch-up on the TV season

Assignments

- ▶ Handouts will be on the course website
- ▶ Due at 4:00 PM on due date; submitted electronically
- ▶ We encourage you to work with a partner
- ▶ You can use the labs and discussion board to meet people

Late Policy

- ▶ No assignments are accepted late
- ▶ If you can't finish the assignment, you can earn part marks for a good partial solution
- ▶ Illness and other disasters are another matter; contact me ASAP!

Labs

- ▶ Labs are done with a partner (a different partner than assignments)
- ▶ They start next week; check the course website for room assignments
- ▶ Each lab is worth 1%
- ▶ To get the 1%, work hard during the lab and complete most of it

Help!

- ▶ Tons of office hours (Come see me or Gerhard)
- ▶ Closed labs (led by your TA)
- ▶ Online discussion boards
- ▶ Study sessions (will be announced on course website)
- ▶ Email (but please read the discussion board first)
- ▶ Anonymous feedback

How to be Good

- ▶ Never look at another teams assignment work
- ▶ Never show another team your work
- ▶ Applies to all drafts and to incomplete solutions
- ▶ Discuss how to solve an assignment only with the course TAs and instructors

Checklist for This Week

- ▶ Read the course information sheet
- ▶ Bookmark the course website and discussion board
- ▶ Buy textbook and clicker
- ▶ Log in to the online discussion board and post a practice message
- ▶ If you plan on working on your own computer, install software listed on course website
- ▶ Drop by office hours and introduce yourself
- ▶ Do the reading and first reading quiz for Wednesday