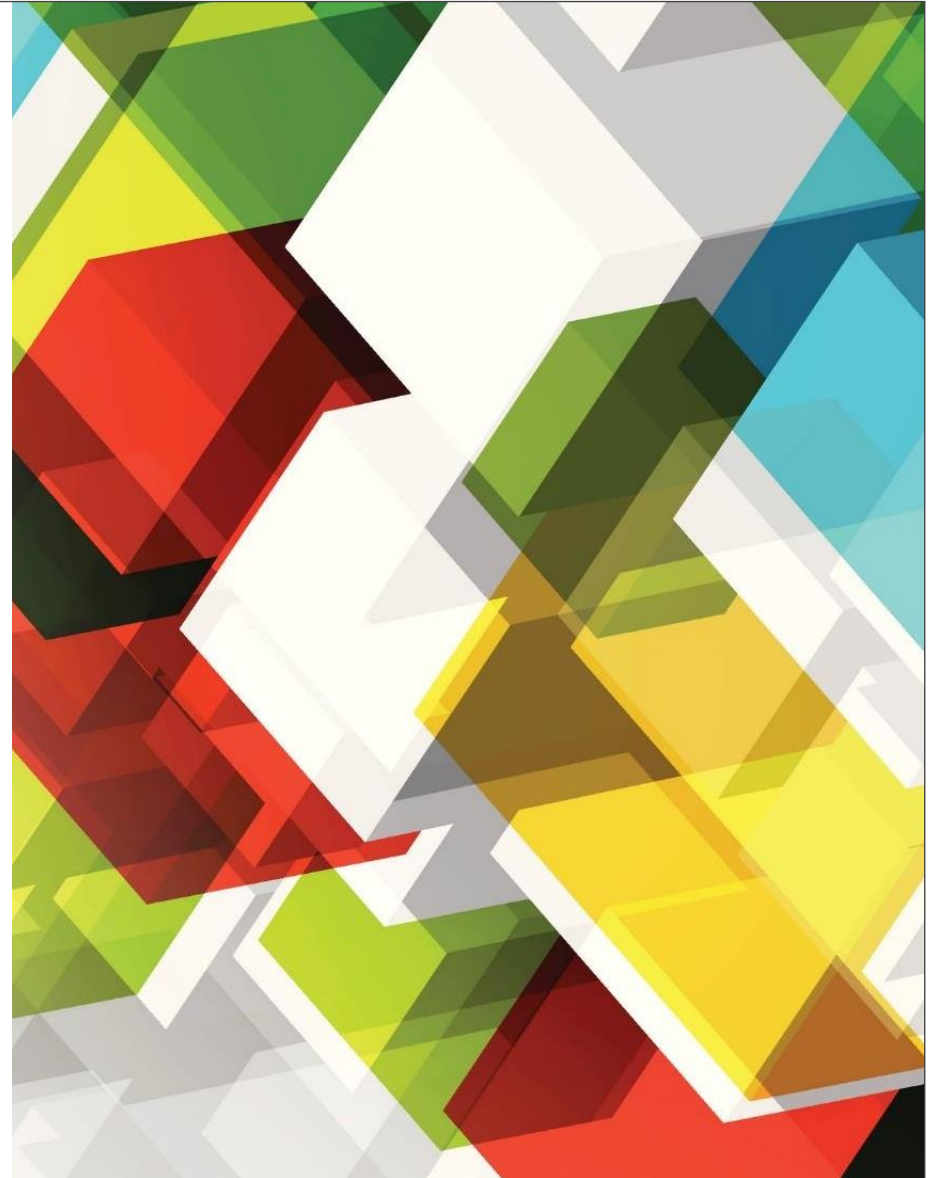


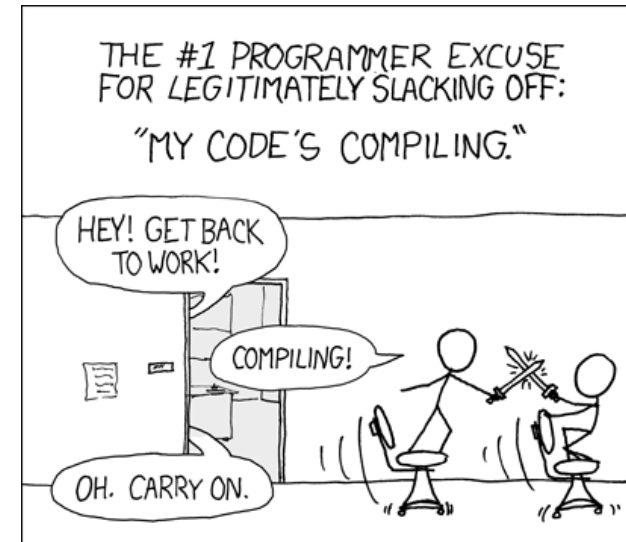
CSC 108: INTRODUCTION TO COMPUTER PROGRAMMING

The University of Mount Union



How to Program a Computer

- Ask Professor Google and get > 9.3 billion results
- Programming involves different:
 - Languages
 - End goals
 - Levels of expertise
- In this class, we
 - Assume no prior experience
 - Learn by doing lots of examples
 - Have fun!



What is a computer language?

- “A programming language is an artificial unambiguous language designed to express computations that can be performed by a machine, particularly a computer.”
- Artificial?
 - Made up
- Unambiguous?
 - No question about the meaning of the programming statements
- Wait, you're saying spoken language *isn't* unambiguous?
 - The man saw the boy with the binoculars.
 - Time flies like an arrow; fruit flies like a banana.

Exact instructions challenge

- Write detailed, exact instructions so that a classmate could draw your picture
- Don't say what the object is – no title, no reference to it in your instructions!
- After 10 minutes, we'll trade instructions and see how well your classmates do

Our language



- We'll be using **Processing**
- Processing is a programming system that provides a simple program structure in an environment that encourages experimentation and extension
- Write a few statements, then run the program to see the results
- Then add a few more lines...program grows bit by bit

Processing's way of working: the sketch

- Engage in a cycle of writing, testing, and improving
- This facilitates an experimental mindset:
 - If something doesn't work, it's not the end of the world
 - Just dust yourself off (fix it)...and try again!



Downloading Processing on your computer

- Already installed on lab computers (use Computer Science image)
- Software download instructions are given in Chapter 2 of the text for your own computer
- [Download / Processing.org](http://Processing.org)



How this class will work

- Most of the work for this class can be completed during class time
 - Lab activities are to be completed in class and demonstrated to the instructor
 - Programming assignments may need to be completed outside of class time
- We will have some brief lectures, demonstrations, and the like, but much of the class will consist of open lab time
- There will be 6 lab activities, 5 programming assignments, and 6 in-class quizzes
- Final projects will be presented during our final period, **Thursday, December 14, 1-4 pm**. They will be worth 25 points and will replace the lowest programming assignment or quiz score. More information is forthcoming!

Important Links

- Course website: [CSC 108 Home Page](#)
- Course syllabus: [syllabus108.pdf](#)
- Online textbook instructions: [Accessing O'Reilly Learning Resources](#)
- Processing: [Welcome to Processing! / Processing.org](#)