V22.0101
Introduction to Computer Science (with Java)

- Professor: Andrew Case
  - Office: WWH 424
  - Office Hours: Mon. 12:15-1:45, Tue. 3:15-4:45, or by appointment
  - Email: acase@cs.nyu.edu

- Website:
  - http://www.cs.nyu.edu/~acase/classes/fall13/UA0101-004/
  - http://cs.nyu.edu -> courses -> course/section#
What is covered

- Fundamentals of Programming
  - Primitive Data Types (Elementary Programming)
  - Flow control (selection statements, loops)
  - Functions
- Object Oriented Programming & Data Structures
  - Arrays, Objects and Classes, Strings
  - Inheritance, Polymorphism, Abstracts, Interfaces
- Advanced Concepts
  - GUI Basics & Graphics
  - Exception Handling & Text I/O
  - Recursion
What probably will not be covered

- This is just an intro course!
- In depth and specialized programming environments (although this class will greatly help in the following)
  - Complex data structures (trees, etc.)
  - Network programming
  - Web programming
  - Game programming
  - Parallel programming
  - Scientific computing
Who should take this course

- If you have an interest in what makes things tick
- If you have an interest in making applications
- Everyone
  - computer programming concepts can help in every discipline
- If you enjoy flow charts or logic problems

Who should not take this course

- If you're just looking to fill a math requirement (it will not be that easy math credit you were hoping for)
- If you don't fulfill the prerequisites
Prerequisites

- Introduction to Computer Programming (CSCI-UA 0002) or departmental permission assessed by placement exam.
Who should take this course

- If you have an interest in what makes things tick
- If you feel gratification in making things
- If you want to make software applications
- If you plan to use computer programs in your discipline

Who should **not** take this course

- If you have never taken a structured programming course before, take CSCI.UA-0002
- If you're just looking to fill a math requirement (it will not be that easy math credit you were hoping for)
Resources/Help

- Textbooks
- Website:
  - Lecture slides
  - Examples
  - Assignments
  - Forums (NYU Classes)
- E-tutor (email help besides forums)
- Lab tutors (14 Washington Place, Lower Level)
- Professor office hours
Textbooks

• Required Text(s):
Attendance

- Lectures and examples posted on the website are designed to work in conjunction with attendance. They are not a replacement!

- If you miss a class
  - Go through the examples and rewrite the code yourself!
  - Do sample problems of your own (even if not absent)
  - If you still don't understand something
    - See me at office hours
    - Visit the lab tutors
    - Email the e-tutor or use the forums
Grading

- Homeworks: 30%
- Midterm(s) (either 1 or 2 midterms): 30%
- Final Exam: 40%
Homeworks

- Reading assignments may be tested
- One programming assignment per week
- Homeworks are required! If your grade for the homeworks is a failing grade, you will fail this course
- Assignments can be turned in up to 5 days late for a 10% deduction per day late (max 30% deduction)
- Solutions will be posted
  - Review them!
“NYU Classes”

• Available from http://home.nyu.edu
• Announcements will be made on it. You are expected to read them
• Students are STRONGLY encouraged to post all questions to the forums
• Homeworks will be submitted on it
• Grades will be posted on it
Cheating

- Talking about ideas on how to solve a problem is **not** cheating.
- **Showing students code and/or using other people's code is cheating!**
- Code Likeness Utility (CLU)
  - obfuscates and generalizes code submitted
  - compares that code for similarity
  - reports copied code
  - cheaters fail
Class Culture

• Open discussion about programming
  • If you email me a question about programming, I will reply to the forums!
  • If you have questions others do too
  • More discussion – more learning
  • Learn from each other
  • Practice
  • Try new things

• Class participation makes the class better
General Advice

● Programming is an incremental learning experience.
  ● DO NOT FALL BEHIND! You won't be able to catch up
  ● Do all the homeworks

● Programming is a different way of thinking. It takes a large amount of time/practice to understand and use these concepts

● Ask questions!!! About anything and everything (computer related)

● Do not share your code

● Write your own code

● If struggling come see me ASAP, do not wait