Introduction to:
Computers & Programming:
Administrative Matters

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Outline

• What to Expect from a Intro to CS Class
• Basic Info:
  – Class Schedule, Room Number, Office Hours, Contact Info, Course Webpage
• Policies:
  – Homework, Exams, Grading, Cheating
• What is covered in the Class
  – Materials, Syllabus, Structure of classes
• Installing Python
What to Expect from Intro to CS

• You will learn how to write computer programs:
  – Sets of instructions that computers follow to do solve problems, display images, etc.
  – The end result of creative problem solving

• Skills that are helpful:
  – Ability to follow instructions loosely
  – Experimentation and game play when solving problems
  – Combination of mathematics (especially logic) and creativity
  – Asking questions without fear
  – Willingness to fix things when they don't work (and not being afraid of breaking something).

• My best students varied a lot in their specialties: mathematicians, artists, filmmakers, philosophers, musicians, etc. …
What to Watch Out For

• Computer Science is a type of Math: info is sequential
• Key concepts can hold you back if you don't understand
  – Similar to disciplines including: art, music, math, …
• May be more difficult than a typical “Intro to” Elective
• Do not start this class late in the term
• Do not hesitate to ask questions in class
• Do not do homework late or miss classes (lectures or labs)
  – This can have a substantial effect on test grades
  – There is no (official) penalty for missed classes or late HW (until end of the term), but doing so impedes understanding
• If you don't understand, seek help immediately so you don't fall behind
  – Ask tutors (lab classes, computer labs, etutors)
  – Ask me (office hours, appointment, email)
• If you have trouble & are grade conscious, consider taking class Pass/Fail
Basic Info: CSCI-UA.0002 Fall 2016

- Websites
  - Section 004: [http://cs.nyu.edu/courses/spring16/CSCI-UA.0002-004/](http://cs.nyu.edu/courses/spring16/CSCI-UA.0002-004/)
  - Section 009: [http://cs.nyu.edu/courses/spring16/CSCI-UA.0002-009/](http://cs.nyu.edu/courses/spring16/CSCI-UA.0002-009/)
  - CSCI-UA.0002 Website:
    - [http://cs.nyu.edu/courses/spring16/CSCI-UA.0002-003/common_syllabus/](http://cs.nyu.edu/courses/spring16/CSCI-UA.0002-003/common_syllabus/)

- Schedule:

<table>
<thead>
<tr>
<th>Section</th>
<th>Days</th>
<th>Time</th>
<th>Room</th>
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</thead>
<tbody>
<tr>
<td>007</td>
<td>M &amp; W</td>
<td>8:00-9:15AM</td>
<td>CIWW 109</td>
</tr>
<tr>
<td>011</td>
<td>T &amp; TH</td>
<td>8:00-9:15AM</td>
<td>CIWW 317</td>
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- No Classes: Mon October 10, Wed Nov 23, Thurs Nov 24
- Administrative Day ([Tues Dec 3 has Monday Schedule](http://cs.nyu.edu/courses/spring16/CSCI-UA.0002-003/common_syllabus/))
- Midterm1: Oct 12 (Section 007) and Oct 6 (Section 011)
- Midterm2: Nov 14 (Section 007) and Nov 8 (Section 011)
- Final: Dec 21 (Section 007) and Dec 22 (Section 011) – 8:00-9:50 (same classroom)

- My office: 715 Broadway, Rm 702
- Office Hours: Monday: 1:30-3PM or Thursday: 10:30-12PM or by appointment
- My Email: meyers@cs.nyu.edu
- My Phone Number: 212-998-3482
Website and NYUClasses

• NYUClasses
  – Submitting Homework
    • Usually python code or text
    • Non-programming HomeWork Should be in pdf form (e.g., scan of drawn flowchart)
  – Getting Grades
  – Course Documents with Licensing Restrictions

• Website – All Other Course Information
  – Schedule, class lectures, sample test questions, python information, etc.
  – Quizzes and supplemental videos
  – Updated throughout the semester (errors fixed, new stuff added)
Grades

• Online Quizzes 5%
• Homework (programming assignments): 20%
• Midterm 1 20%
• Midterm 2 20%
• Final 35%
• All grades are converted to letter grades before averaging (A = 4, A- = 3.7, B+ 3.3, ..., D = 1, F = 0)
Your Grade in Python

```
• def calc_grade(Quiz, HW, Mid1, Mid2, Final):
    # Quiz is the average grade for quizzes
    # HW is the average grade for programming assignments
    # Mid1 is your Midterm 1 grade
    # Mid2 is your Midterm 2 grade
    # Final is your grade on the Final Exam
    Grade = (Quiz * .05) + (HW * .2) + (Midterm1 * .20) + (Midterm2 * .20) + (Final * .35)
    return(Grade)
```
Cheating

- Tests, homework and grades are:
  - Tools for assessment of what you did and did not learn
- Cheating is when you copy someone else's work without giving them credit.
- Discussing homework with classmates is not cheating if:
  - Each student produces a different solution and/or
  - Afterwards, each student could solve similar problems on their own
  - For large collaborations, students should cite each other's name on the HW
- Consulting other students on tests is definitely cheating.
- The only reason to cheat is:
  - You think obtaining high grades is more important than learning
    - And you don't think you will be caught
- I have no respect for cheaters:
  - They will fail the class and be reported to the administration
Late Homework, Missing Classes and Grades

• It is Easier to Learn the Material in Class (including labs)
  – Reading online lecture notes is not the same as attending
  – I sometimes present material differently from the modules and from the book
    • For example, I place greater emphasis on writing code using functions
    • This can make relying on online materials more difficult

• Multi-choice quizzes – no credit if late

• Other Homeworks: Lateness → Natural Consequences, Fairness and Guilt
  – Natural Consequences
    • Easier to prepare for tests if you have graded homework on the material on the test
    • Doing homework on time makes it easier to keep up because CS is sequential

  – Fairness: The graders mark on-time homework first and then late homeworks

  – Guilt:
    • Graders have lives too – it is an imposition on them when you do late HW
    • They are paid by the hour – if they run out of time, they may not have time to grade your late homework, e.g., they have to pass their classes too
    • Extremely Late HW may never be graded if the grader simply does not have time

  – No Points Taken Off for these unless it is the End of the Term and Grader simply does not have time

  – I think these consequences are severe enough without me taking additional points off, which I think would compound the problem
If You Miss a Class, Please keep Up With the Material

• Check the website
• Pay me an office visit
• Consult with a classmate (get their contact info)
• Plan ahead so you can go to the corresponding class in another section (ask me first, please.)
Homework

- Chapters in the Gaddis Book (and some other reading)
- Online modules
- Online multiple choice quizzes after each module (5%)
- Programming Assignments (20%)
  - Each program is judged as follows:
    - Does it solve the problem posed by the assignment
    - Is it clear?
    - Does it work?
    - Do you go beyond the assignment and show that you really know what you are doing? Do you add “bells and whistles”? 

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CSCI-UA.0002
Why Does it Matter That I am Teaching 2 Sections

• It is possible to makeup missed classes and exams
  – It is OK to switch classes occasionally, to make up a test or a missed class, etc. as an exception to the rule
    • provided that you let me know (by email) and one class does not become overcrowded and disfunctional.
      – Overcrowding is illegal due to the fire code
    – In terms of make-up classes, the alignment may be imperfect, e.g., if one class ends up going more quickly than the other for any reason (e.g., fire drills, bad weather, etc.)
• Shared office hours (with a 3rd class on another topic as well).
Syllabus

• Introduction to Programming Languages
• Python Basics
• Working with variables and operators
• Control Structures
• Repetition Structures
• Working with Text
• Functions and Modules
• Lists and Dictionaries
• File Input and Output
• Other topics, as time permits
Structure of Classes

• **Types of Classes**
  – 1st class most weeks: lecture class, sometimes with in-class program
  – 2nd class most weeks: lab-style class.
    • Everyone will do their “homework” in class with the support of T.A.s and myself
    • Finish Homework at Home and send in (approximately 1 assignment per week)
  – Tests: midterm1, midterm2 and final
  – Reviews for Test

• **Laptop Recommended, but if you do not have a laptop**
  – We will partner you with someone who does and you will both include each other's names on your homework so the grader knows who you partnered with.
  – You will be able to get copies of your work by email and submit it later.

• **Online materials (weekly):**
  – Online short videos on specific Topics (see website)
  – Online quizzes paired with reading material
Materials

- **Starting with Python (Third Edition)** by Tony Gaddis
  - Cover most (not all) material in book, as per HW assignments
  - Rate of reading: 1 chapter every 2 or 3 classes

- **Self-Study Materials on Website:**
  - Online short videos on specific Topics
  - Online quizzes paired with reading material

- **Slides and Notes from Lectures:** most material available online, but copyrighted material in NYUClasses (just 1 set of slides)

- **Python Documentation** (reference): https://docs.python.org/3/

- **Additional material:** How computers work, algorithms, properties of other programming languages, etc.
Install Python (Part of 1st Homework)

• Go to www.python.org
• Click on the Download tab
• Download Latest Version of Python 3 (NOT Python 2)
  – Version 3.4.3 as of June 26, 2015
  – For Windows, MAC or Linux
    • * Python 3 for tablets & cell phones exists, but is not handled in this class and not currently supported by NYU tutors or professors
• Install Python
  – If there are installation problems, do not be silent
  – Additional Instructions at:
    http://cs.nyu.edu/courses/fall15/CSCI-UA.0002-002/common_syllabus/#software
  – If you have a laptop, take your laptop to the lab tutors
    • Weekdays in the glass rooms in back of labs at 14 Washington Place
  – Other tutoring available – see common curriculum website:
    • http://cs.nyu.edu/courses/fall15/CSCI-UA.0002-002/common_syllabus/