

CMP 167: Programming Methods I

Tu/Th 1:00 - 2:40 PM

Gillet 219

**Instructor:** Songqiao Li ([sli2@gradcenter.cuny.edu](mailto:sl4142@columbia.edu))

**Office:** 365 5th Ave 4413

**Office Hours**: W 3:00 - 5:00 PM

**Course Description:** Structured computer programming using a modern high-level programming language. Includes console I/O, data types, variables, control structures, arrays, function definitions and calls, parameter passing, functional decomposition, and an introduction to objects. Debugging techniques.

**Prerequisites:** MAT 104

**Note:** For students who intend to major in Computer Science, Mathematics, Computer Graphics and Imaging, or the sciences. Some previous computer programming experience is recommended. Not intended for students in Accounting or Computer Information Systems; the technical content is the same as CIS 166 but the emphasis is different.

**Policies:**

* Each class will consist of lectures and hands-on workshops
* Collaboration and discussion is highly encouraged
* Attendance is expected and will be taken each class

**Textbook:** [Think Java: How to Think Like a Computer Scientist](http://greenteapress.com/thinkjava6/thinkjava.pdf) (Allen B. Downey & Chris Mayfield)

**Piazza:** [https://piazza.com/lehman/fall2016/cmp167/home](https://piazza.com/class/it3meyxc68m31p?cid=3#)

**Grading**

* Homework (6) 30 %
* Quiz 10 %
* Midterm 20 %
* Project 20 %
* Final Exam 20 %

There are no make-up exams.

Homeworks are due at the beginning of class but can be turned in early for feedback (via email). The code have to compile correctly to receive any credit. Late submission will result in 50 percent penalty if turned in late within a day. 0 credit otherwise.

There will be a bonus grade if no class is missed and every assignment is turned in on time.

Project can be done individually or in groups of 2 or 3. Each team needs to pick a topic, work on the code and present the project to the class in a 5 minute presentation during the second to last week of school.

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|  | **Topic** |
| 1 | Introduction, History, Environment Setup (Read Chapter 1) |
| 2 | Variables and Operators, Basic I/O (Read Chapter 2) |
| 3 | Conditionals and Logic (Read Chapter 3) |
| 4 | Loops (Read Chapter 5) |
| 5 | **Midterm** |
| 6 | Array (Read Chapter 8) |
| 7 | File I/O |
| 8 | Methods |
| 9 | Classes |
| 10 | **Quiz** |
| 11 | Group Project |
| 12 | Group Project |
| 13 | Group Project, **Presentation** |
| 14 | **Final Exam** |