COSC 150 – ADVANCED PROGRAMMING
COURSE SYLLABUS
Section 01: Yang TR 3:30PM-4:45PM Reiss 262
Section 02: Koster MW 11:00AM-12:15PM Car Barn 205

Instructors: Prof. Grace Hui Yang (Section 01) and Prof. Barrett Koster (Section 02)

TAs: Wei Liu, Samuel Jankowski,

Office Hours: Grace Hui Yang
Tuesday 12-2pm
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Barrett Koster
MTWR 11am-12am
St. Mary's Hall, room G36
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TA Office Hours: Monday 2-4pm

Contact Information: Please post questions to Piazza (https://piazza.com/georgetown/fall2017/cosc150/home). Questions that concern grades or private matters should be sent as private Piazza notes. Email, which will produce slower results than Piazza, should be used as a last resort.

Textbooks: *No required text.*

However we recommend the following textbooks:

Thinking in Java (4th Edition) 4th Edition
by Bruce Eckel

Practical Object-Oriented Design in Ruby: An Agile Primer (Addison-Wesley Professional Ruby) by Sandi Metz

This class will also have a significant online presence. Students are <u>required</u> to participate in online discussions on Piazza (https://piazza.com/georgetown/fall2017/cosc150/home).

COURSE DESCRIPTION

The objective of the course is to develop a mastery of object-oriented programming using the Java programming language and to expose students to advanced programming and basic software engineering concepts important for upper-division courses. Topics include object-oriented design and programming, unit testing, UML, event-driven programming, exception handling, sockets, graphical user interfaces (GUIs), and advanced programming projects such as artificial intelligence and/or mobile computing.

Prerequisite: COSC-052.

COURSE OBJECTIVES

Students passing this course will be able to …

1. to develop software solutions with some degree of independence and maturity, and to make use of current software libraries and packages for advanced program development,
2. to program with proper use of object oriented concepts,
3. to create event-oriented GUIs with sensible human-computer interaction, and including 2D graphics
4. to use effective techniques for building and debugging robust programs, including a debugger, unit testing, and exception handling,
5. to use basic software engineering principles and design paradigms,
6. to learn collaborate in teams to finish a large project.

POLICIES

- Please turn off cell phones during class.

- We will do our best to respond to emails within 24 hours. Please also consider posting your questions to Piazza (https://piazza.com/georgetown/fall2017/cosc150/home).

- Behave civilly: don't be late for class; don't read newspapers/blogs/etc. during class; don't solve Sudoku puzzles during class; don't struggle with crossword puzzles during class; respect others' opinions, even if they are clearly wrong.

- Adhere to good scientific principles and practices, and uphold the Georgetown Honor System.

Academic Integrity

Academic integrity is central to the learning and teaching process. Students are expected to conduct themselves in a manner that will contribute to the maintenance of academic integrity by making all reasonable efforts to prevent the occurrence of academic dishonesty. Academic dishonesty includes (but is not limited to) obtaining or giving aid on an examination, having unauthorized prior knowledge of an examination, doing work for another student, and plagiarism of all types, including looking at or copying another student's code.

Plagiarism is the intentional or unintentional presentation of another person's idea or product as one's own. Plagiarism includes, but is not limited to the following: copying verbatim all or part of another's written work; using phrases, charts, figures, illustrations, code, or mathematical / scientific solutions without citing the source; paraphrasing ideas, conclusions, or research without citing the source; and using all or part of a literary plot, poem, film, musical score, or other artistic product without attributing the work to its creator. Students can avoid unintentional plagiarism by following carefully accepted scholarly practices. Notes taken for papers and research projects should accurately record sources of material to be cited, quoted, paraphrased, or summarized, and papers should acknowledge these sources in footnotes.

In short, do not cheat. Dealing with cheating is by far the worst part of a professor's responsibilities, and it's one that we would greatly like to avoid. **If you are caught cheating, you will be referred to the Honor Council, without exception.** It doesn't matter if you plagiarized one part of one answer in a homework assignment or outsourced your entire semester project to www.willdoyourprojectforcupcakes.com. Telling us that we're ruining your future/career/life will make us feel wicked bad, but won't stop us from referring you to the Honor Council.

Ignorance of Georgetown's Standards of Conduct is not an acceptable excuse for academic dishonesty. You are expected to be familiar with and abide by these standards.

Bottom Line: If you are unsure whether or not something is permissible, ask us beforehand.

GRADING

Homeworks	75%
Final exam	15%
Team work	10%

NOTE: We reserve the right to change content in the syllabus with one's notice.